

# MASSACHUSETTS PLOUGHMAN



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**MASSACHUSETTS PLOUGHMAN**  
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**LINUS DARLING,**  
PROPRIETOR.  
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Correspondence from particular farmers, giving the results of their experience, is solicited. Letters should be signed with the writer's real name, in full, which will be printed or not, at the writer's wish.  
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### AGRICULTURAL.

SOMETIMES peas are severely injured by the thefts of the birds. It is recommended to stretch a line of twine soaked in petroleum along the row just high enough to clear the ground when peas begin to appear above ground.

WHEN the trees come from the nursery it seems a pity to cut them back almost to a stick. But a very severe trim will give them a better send off with less risk and trouble than by setting them out with whole branches.

As compared with the other soils experimented with, the sandy soil gives the best results from irrigation. This is especially true when sewage and similar materials which require free access of oxygen for their decomposition were used.

THE best dairy farming is a process of boiling down. Condense soil into the form of fodder and grain; condense cattle food into cream or butter. Then the final boiling down is into dollars and cents, while the farm itself grows richer by the process.

ANOTHER group of Dutch Belted Stock from the herd of Mr. Orson D. Nunn, of Llewellyn Park, N. J., is shown in this week's illustration. These animals, with uniform and peculiar markings of jet black and pure white, are a superb ornament to any farm. Their breeders say that they are hardy and very productive as milkers.

### Fast Growing Peach Seedling.

ED. MASS. PLOUGHMAN: DEAR SIR:—Peach trees are all heavily budded here, but cannot tell yet if they are killed by the freeze. We are situated on very high land. The thermometer indicates below 20 degrees cold.

I have a seedling peach, one year's growth, measuring 3 feet, 8 1-2 inches high from surface of ground. There are 41 main limbs, the largest 1-2 inch in diameter. The entire spread of branches (natural) is 9 feet in circumference. Diameter of base at surface, 1 1-4 inches; it is 3-4 of an inch at one-half its height. Tap root is nearly 3 feet long. There are 25 main roots, two over 4 feet long, all well supplied with a network of beautiful fibrous rootlets, the spread of roots averaging over five feet in diameter. The entire length of wood above ground is not far from 145 feet. The entire length of roots would probably extend more than 600 feet. Who can beat this record?

I also have a peach tree eight years old, base 5 inches in diameter, 5 feet to the main limbs, three in number. The whole top was killed back to within 3 feet of body in the winter of '95-6; cut off the dead portion in March following. This tree grew nearly a full head last year, and is today full of blossom buds. Have several others which I served the same way that did well. I was advised by several to cut the former tree to the ground.

H. O. C.  
Hopkinton, April 21, '97.

[Such rank growth is likely to be tender and the trees short-lived. Better prune new growth severely and apply only ashes and bone as fertilizer, but no manure.—Ed.]

### May on the Farm.

This month is of all others the most important to the farmer. Now or never must many of our most important crops be planted, and to insure success they must be planted in due season and after thorough preparation of the soil.

The sooner potatoes go in the better; indeed, if planted in April they are apt to do better than in May. Early sweet corn for table use should also be planted without delay, and successive plantings made way ten or fifteen days till July 1st, or if more convenient, plantings of early Crosby corn and the Stowell's evergreen may be made at the same time, and will follow each other in ripening by ten or fifteen days. Successive plantings of radish, lettuce and peas should be made every two weeks to insure continuous supplies of these excellent vegetables. For late planting the Champion of England and the black-eyed marrow-peas are the best.

Field corn for ears or ensilage is best planted about the 10th to the 20th of this month, "when the oak leaves are of the size of squirrels' ears" is the old Indian rule, and it is not a bad one.

Tomato plants should not be set out till danger of frost is over; the time depends somewhat on location, from May 15th to June 1st. Early set plants always bear sooner than later settings if they escape the frost.

More care is needed in preparing the ground for planting than is usually given to it. Repeated harrowing, rolling and plowing are required to reduce the lumpy soil to a fine mealy mass, in which the roots of our crops may freely and quickly develop and mature their crops during our short season and treacherous climate. With the many modern tools in the way of harrows, manure spreaders, rollers, plows, etc., there is little excuse for neglect of any of the essential conditions for the quick growth of plants of all kinds.

Care is also required to put in the seed in straight rows, and at even distances between the rows, so that most of the work of cultivation may be done by the cultivator or shove-hoe, leaving little for the hand-hoe or hand weeding.

The market gardener is now busy marketing his lettuce, radishes and cucumbers from the hot beds and frames, and rhubarb, asparagus, dandelions, spinach and winter onions from the field; this, with all the planting crowding upon him, makes him a busy man.

The farmer has good reason to be a lover of nature, and of all the charming life that now bursts into activity under the warm sun and gentle breezes. Among the most attractive of all the charms of this season are our native birds. Few countries can boast so large a variety of delightful songsters. If we have not the European lark, we have a match for him in the Wilson's thrush, and no bird can compare with our bobolink for rollicking life, and irrepressible spirits; it is a great pity that the early cutting of our grass fields has interfered much with his nesting season.

If for no other reason, the blue jay, the crow and the squirrel deserve to be hunted on account of their vicious habit of robbing the nests of the small birds of their eggs and younglings.

But perhaps the most charming of all our song birds is the golden oriole, who arrives here promptly about the 8th of May, and who fills the air with his sweet songs, and makes the elm trees, where he delights to hang his nest, glow with the brilliant yellow of his feathers. He is a voracious feeder upon insects, and quite harmless, and universally beloved.

It is a pity that the common robin can not show so good a character. He eats large quantities of harmless angle worms, and some other insects not so harmless, but his appetite for cherries, plums, grapes and various other small fruits is so voracious that most gardeners drive him off with a shot-gun in spite of the law for his protection. A more generous way would be to plant fruit enough for both the robins and ourselves.

We fear there is little to be said in favor of the pugnacious, prolific and hardy English sparrow. He flourishes

in large numbers in our small cities and villages, driving out the far more desirable blue bird and song sparrow.

### Flowers and Fruit.

TWO NATICK FARMERS WHO MAKE THE MOST OF THEIR CHANCES.

The large town of Natick is located about seventeen miles west of Boston. It is almost a city and has important manufacturing interests which create brisk markets for fruit, vegetables and dairy products. There are many farms in Natick, interesting from the extent or nature of the products, or for the originality and enterprise of the owners. Some of these farms will be described forthwith.

#### ACRES OF PLANTS.

A somewhat peculiar kind of horticulture is carried on by W. C. Jennison on Walnut street, just in the centre of Natick. Quite a large proportion of the little four-acre farm is devoted to the growing of hardy perennial floral plants, of which there are several hundred kinds on the place. They are propagated by seeds and by division of plants or root, and are sold to florists and to private trade. The perennial plants are, some of them, arranged in beds to give an ornamental effect. It is a kind of farming which appears upon the surface quite dainty and attractive, but Mr. Jennison says the work is much like growing vegetables, and by no means easy.

Pansies are one of the specialties, and these pretty plants, are grown to the number of 25,000 annually. There are two small greenhouses filled with a variety of plants, including several which Mr. Jennison has originated by cross-breeding.

#### MANURE MULCH FOR CURRANTS.

Some fruit is grown upon the place. There is half an acre of currants, the Cherry and Fay's Prolific varieties. These two kinds are considered much alike, with the advantage of productiveness in favor of the Fay's. The bushes are kept cultivated, and a heavy mulch of manure around the bush helps keep down the weeds. The old wood is cut out occasionally and the worms are kept off by Paris green the first of the season, and by a solution of hellebore as the berries approach the season of ripening. The work of the Paris green is considered much the more certain and thorough. Many bushes are sold for propagation.

Though by lameness confined to a wheel chair, Mr. Jennison manages to look after the various departments very actively, and by his skill and executive ability he makes a good living when many an able-bodied farmer allows himself to decide that farming cannot pay.

#### PEACHES WITHOUT MANURE OR FERTILIZERS.

Mr. C. A. Dickinson, a neighbor of Mr. Jennison, has a farm of rich, heavy land and suitable for growing trees, and Mr. Dickinson is working into the nursery business as fast as possible. Besides nursery stock he has an orchard of 1000 peach trees. These have already borne one good crop year before last and the owner expects a big yield again this year. The soil is rather heavy and moist, too much so for peaches, as Mr. Dickinson thinks, and the trees would be inclined to make a rank growth, resulting in winter-killing. To prevent overgrowth, no manure or fertilizer is used upon the trees, but the natural richness of the soil causes growth enough. The trees are cut back sufficiently to keep the tree in a compact form and the ground below is kept cultivated. Varieties are early and late—Crawford, Globe, Stump, Oldmixon, Late Crawford is preferred. Mr. Dickinson gets fancy prices in Boston for the best of his fruit. He does not thin the peaches much except the Oldmixon.

#### QUARTER ACRE OF ROSES.

In sight of the farm just described, two large greenhouses are in process of building. They are strictly modern affairs and will together cover 13,000 square feet. Mr. R. Montgomery, the builder, intends to fill both houses with roses exclusively, to be sold wholesale to the Boston trade.

Other farms in this part of the town are particularly well adapted to the production of grass and milk farming. They will be described in the next article.

### Farmers on Farm Topics.

HINTS ON SPRING WORK AND WHAT CROPS TO GROW.

A number of questions on seasonal farm subjects, recently sent to leading farmers, by Secretary McKen of the Maine Board of Agriculture, resulted in a variety of replies. We quote below those which are of general interest.

#### WHOLE ENSILAGE.

I built a silo last fall and put in three acres of yellow corn, ears and all, and one acre of sweet corn. It was put in whole. My silo was doubled boarded, inside boards matched, with paper between; and the ensilage has kept well and has given very satisfactory results. I shall fill it the same this year. C. V. Knight, Turner Center.

#### EARLY PLOWING.

I plow as soon as the land is in proper condition. If the ground is dry I cultivate it thoroughly; but if rather moist I cultivate just as little as possible and depend on after culture when the ground is in a drier condition. Crops are never improved by cultivating the soil when it is so wet as to pack. Spread all the homemade manure as evenly as possible over all the ground tilled, using chemicals only in hill and drill.—S. A. Shaw, West Auburn.

#### LIKES OAT FODDER.

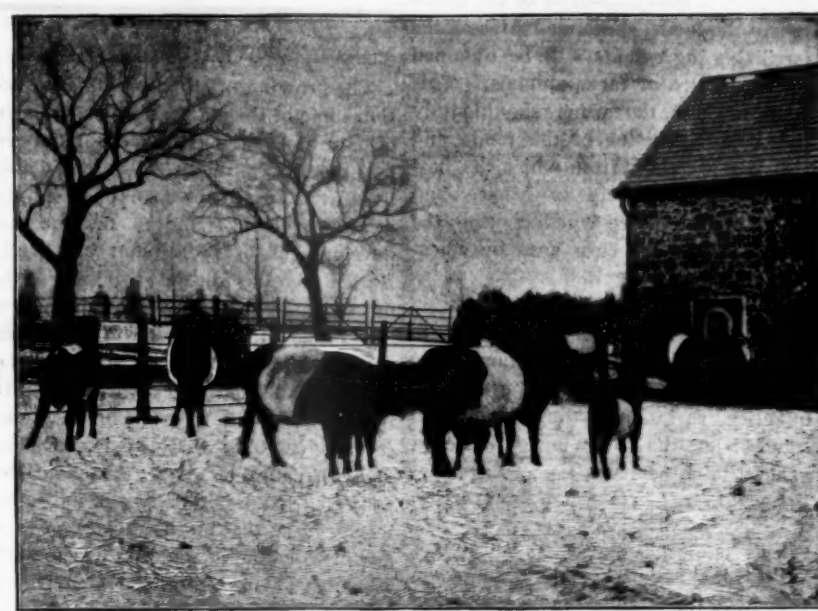
I have been feeding oat fodder, cut when full in milk, with good results. My horses have done as well as they would on good hay, and all the oats that would have come from the straw if cut when ripe, after taking out the toll. If I am correct, I have saved the difference between the price of hay and oat straw. I have wintered my sheep on the same, with the same good result; but I would say I believe the good results have come from the mode of cutting and curing. It was reaped and dropped in as large bunches as the reaper could handle, and left unbound to make. The top straw became well bleached, the rest was green and nice and made a bay of fodder good to look at.—D. A. Pratt, Washburn.

#### OATS AND PEAS.

I sowed oats and peas last season for a soiling crop and the eighteenth of July I commenced to cut and feed a liberal amount to my cattle. My pasture afforded quite good feed up to that time. My cows did not slack off in the flow of milk, and when the peas and oats got too ripe I had a piece of fodder corn which I fed until the frost came, and my cows never have done as well before. So I shall keep on sowing oats and peas to feed my stock as soon as the pasture begins to fail. In so doing I can increase my herd of cows and that will give me more money for butter, also more manure for my farm, and I guess that is money when we are paying out from thirty-five to forty dollars per ton for fertilizers, as the most of us have at ways done.—J. W. Dudley, Castle Hill, Me.

#### KEEP AHEAD OF THE SEASON.

My spring's work begins in a measure the season before. I start the plow as soon as the condition of the ground will allow after haying, and do as much breaking as time will permit. As the season advances and crops are harvested, I follow with my plow. I would, if possible, do the most of the plowing in the fall, both breaking and stubble. During the winter draw and spread the dressing. By this method when spring opens we are ready to prepare the seed bed. Harrow the ground frequently, until the seed is sown. This will destroy weed seeds most effectively and aid in rendering available the plant food contained in the soil. I plant sweet corn for the factory, yellow corn for feeding purposes, potatoes and beans. These crops are planted upon the sod. The corn ground is dressed with barn manure. Potatoes and beans are planted upon boughten fertilizers and dressing applied for the grain crop, which occupies the second year in the rotation. For grain, sow oats and peas, cut them in the milk state, and feed as hay. I advocate this as the most economical method for the farmer to pursue. Let clover predominate when seeding for grass. The early cutting of the grain gives the grass an opportunity to get a healthy, vigorous growth, ensuring a good hay crop. Have as many



DUTCH BELTED CATTLE. From the Herd of Mr. Orson D. Nunn, Llewellyn Park, Orange, N.J.

acres under the plow as possible. A three years' hay crop is all that should be harvested before repeating the rotation.—W. E. Leland, West Minot, Me.

#### FRUIT, CLOVER AND POTATOES.

My leading specialties are strawberries, rhubarb and asparagus. I like to plant early potatoes on the old berry patches to get the ground in suitable condition for a renewal of the straw, berry or other crops. My plans for future rotation are: strawberries two seasons, then plow the last of July and sow to crimson clover, which will make a good growth of roots and foliage before freezing weather on moist ground, or on dry, sandy soil if the season happens to be a rainy one. Turn this under in the spring and thoroughly pulverize the soil, scatter commercial fertilizer in the drills and plant early potatoes. Dig and market as soon as the tops begin to ripen. Then prepare the ground again for strawberries and set plants early in August if possible. If the season is favorable and the ground in good condition these will make a good growth and produce a fair crop the following season. Then plow and rotate again—clover, potatoes, strawberries. From my own experience and the testimony of others, I believe the fertility of farming lands can be increased at less expense, by growing more clover, than in any other way. I prefer crimson clover because it makes a quicker and heavier growth in the fall than the other kinds. Strawberries are my favorites, and I try to get the very best early and late varieties, thus prolonging the season of one of nature's most delicious and healthful productions.—A. V. Metcalf, Brunswick, Me.

### Fertilizing Materials.

VARIOUS FORMS OF PLANT FOOD AND THEIR APPLICATION.

The aim in applying fertilizers is to supply the soil with nitrogen, phosphoric acid and potash, in which most soils are deficient. Some of the materials which furnish nitrogen are nitrate of soda, sulphate of ammonia, tankage and dried blood. Another great source of nitrogen is the air. The only way this form of nitrogen can be used is to grow some leguminous crop, as clover or peas. When clover and peas are ploughed under, or fed to stock and the manure returned to the soil, a large quantity of organic matter and nitrogen is added to the soil for the benefit of succeeding crops.

One other very important element is phosphoric acid, which usually comes in the form of bone meal and acid phosphate. Bone meal contains a small percentage of nitrogen as well as of phosphoric acid.

In regard to the potash, the great bulk comes from the German products, of which muriate and sulphate of potash are most commonly known.

After finding out what proportions of plant food ingredients are demanded by the soil and crops, the next thing is to apply them to the very best advantage. Many farmers drill in their fertilizers with their grain; this plan may be economical, but is not always advisable; for the young sprouts are often damaged

### New Fruits Tested.

THE AMHERST EXPERIMENTS A PRACTICAL GUIDE FOR NEW ENGLAND GROWERS.

Worth its weight in gold, almost, is the new Fruit Bulletin of the Hatch experiment station. Among the best of its valuable features are the tests of the new varieties of fruits.

While these tests are not to be taken absolutely without reserve, as when, for instance, the old Jucunda strawberry is given as more productive than the Bubach, still, in the main, the trials will prove a direct assistance to the practical grower. The bulletin is certainly unprejudiced and is decidedly more reliable than the interested and flowery descriptions contained in the average nursery catalogue.

#### APPLES.

While speaking of apples not generally cultivated here, Prof. Maynard says that the Lawver or Delaware Winter is much better in quality than the Ben Davis, and promises to be as good a keeper. If so, it ought to prove the king of market sorts. The only fault of the Ben Davis is its poor, dry quality.

All who have grown the curious Red Russet will appreciate the description: "This variety bears heavily and the fruit when thinned is of good quality, intermediate between the Baldwin and Roxbury Russet. It is claimed to be a graft hybrid between the two. The past season it produced perfect specimens of the distinct Baldwin type with no Russet markings, specimens of the perfect russet type with no red markings, and the type of the variety, having both red and russet markings."

Farmers who have the red russet do not seem to value it especially.

#### GRAPES.

Among new grapes the Geneva is especially commended. It is earlier than the Concord and a good keeper. These are great points for New England. "Vine moderately vigorous, very hardy and free from disease. Bunches medium, loose, berries large, light yellow color, quality good, but not the best, adheres well, very productive. Promising on account of its hardiness, freedom from disease, and good shipping qualities."

#### NEW GOOSEBERRIES.

are numerous. The one which receives highest praise seems to be the Lewis Roesch, which, says Prof. Maynard, is "probably an American seedling of the English type. Bush upright, very vigorous and productive; berries uniformly very large, oval; skin thin, smooth, pale yellow; quality excellent. A remarkably fine variety."

Triumph, Downing, Columbus, Chautauqua and Crown Bob are commended in the order named.

#### CURRENTS.

For currants the North Star ranks first in productiveness, with quality as good as any, but size only medium. Among blacks, the Champion ranks first.

RASPBERRIES, BLACK AND RED. Brackett's Seedling surpassed all other blackcaps in productiveness, and is desirable in every way. Eureka and Wade are commended.

The Loudon is called the most promising red raspberry on the station list. Its yield was double that of any other kind.

#### BLACKBERRIES.

Snyder, Taylor and Agawam are still placed as the standard kind of blackberries, although several new sorts are mentioned.

#### BEST STRAWBERRIES.

Of the thirty varieties of strawberries that were given a test under ordinary field culture, the following, named in order of their yield, were most productive: Haverland, Greenville, Eureka, Lovett's Early, Miner's Prolific, Pacific, Our Choice and Mrs. Cleveland.

Haverland and Lovett's Early produced more than any other varieties previous to June 11, and Eureka and Golden Defiance gave the largest yields after June 25. Many new kinds were tried in small plots. Beverly is declared identical with Miner's Prolific. The Marshall is declared unprofitable under ordinary conditions. Arrow, Glen Mary, Gandy Belle, Howard's No. 14 are commended highly.

Those given as ten best standard kinds of strawberries are: Beverly, Brandywine, Bubach, Enhance, Golden Defiance, Greenville, Haverland, Leader, Lovett, Parker Earle. Parker Earle was most productive of all on a small scale, but requires rich, heavy soil and moisture to succeed.

E. L. VINCENT.  
Broome Co., N. Y.







POULTRY.

A Believer in the Hen.

This paper will begin with a confession. I was originally a total disbeliever in the hen. She was with me a fowl simply brought into existence to make life miserable for us poor men, and to be tolerated only because of the pleas of the gentler sex. Born with an insatiable appetite and the most destructive of all creatures so far as relates to her beak and claws. I had thought she never should be allowed to occupy any place of consequence upon my premises. I no longer hold this view. Why?

Well, I still hold that the hen out of place is a troublesome thing. She will do an immense amount of damage out of her sphere. So I have been trying to find the hen's sphere, and we, wife and I, think we have found it. Early in the game it began to be evident to me that the hen in proportion to her value was more profitable than any other thing in the shape of beast or fowl upon the farm. My wife attended to that branch of the business and does now. Keeping a record of her transactions, she was always able to show a balance on the right side. This opened my eyes gradually, and from being an opponent of the hen I began to look with favor upon her. Beginning with a few hens, by degrees we increased our flock until it outgrew the house, and then we made plans to enlarge the building. The past winter I have got out timbers for a hen house twice the size of the old one.

The feed is all raised on the place except the bran. In the morning the hens get a ration of warm feed composed of bran and meal. Later in the day they are fed corn on the cob, so that they may be compelled to work for what they get, or buckwheat or oats scattered in chaff or straw. In winter a cabbage is hung up in the house at such a height from the floor that they can only reach it by jumping. Shells are provided during confinement and a box of dust which they greatly enjoy. By setting hens early we get pullets which begin to lay in the early winter, and keep it up while eggs bring a good price. As to breed, we have White Leghorns and barred Plymouth Rocks.

We fence the garden with wire, and have a yard inclosed in the same way in which the hens are confined whenever occasion demands. Instead of looking upon the hen as an enemy to our peace and bodily comfort, we consider her one of our best friends. E. L. VINCENT.

SITTING HENS.

A hen that is gentle and will allow one to move her off and on the nest without showing any sign of fright will usually make a good sitter, but hens that are easily frightened and appear to be unsettled when on the nest should not be allowed to sit, for they will invariably break some of their eggs, and probably hatch very few chickens.

There are some varieties of Game that resemble the Leghorn in disposition, and while they cannot be properly classed as non-sitters, they make very poor sitters, and should only be kept as layers. On the farm, where the hens have unlimited range, the Games make excellent mothers, but when the chickens are raised in a small yard they are undesirable, and will frequently try to kill the chickens of other hens. In selecting good sitters it would be hard to find a breed that could improve upon the Plymouth Rocks. The Brahmas and Cochins are too large and clumsy to make good sitters, but a medium-sized Plymouth Rock hen proves almost always satisfactory.

A mistake that is often made in selecting a sitter is in her size. A small, light hen will stand less chance of breaking her eggs and will raise the chickens better than one that is unusually large and heavy. Owing to the smallness and lightness of the Bantam, it is very rare that one breaks its eggs or kills its chickens. Old hens are lighter than young ones, and while they do not lay very many eggs, a few should be kept as sitters.—Cable.

CHOOSING EGGS FOR INCUBATORS.

Now that the hatching season has begun in earnest, the question of choosing eggs for incubation becomes a serious one. People often wonder why they get a good hatch sometimes and a wretchedly poor one at another. One brood are as hardy as nails, and another lot turn out puny weeds that never seem to thrive.

There is no doubt that if poultry keepers would observe proper discrimination in selecting the eggs for incubation, much loss and disappointment might be prevented. The first point to notice is to ascertain if the fowls from which the eggs are selected are in thoroughly good health, and more particularly does this condition apply in the case of the male bird.

Having been satisfied on this point, then, if possible, choose such eggs as are of the average size laid by any particular hen, and discard all that are either much smaller than this average or those that are much larger.

Abnormal eggs should not be set un-

less one is in search of monstrosities. Of course if a bird always lays large eggs, the same may safely be used, and in this way a strain may eventually be produced that are all disposed to the production of large-sized eggs, just as in the same way it is possible by choosing eggs only for sitting from the best layers to create a strain of fowls whose egg-producing powers may be far in excess of their progenitors.

Handling a Wood Supply.

HOW THE SAWING MACHINE WILL SAVE WORK WITH THE AXE.

Farmers are coming to realize that they must begin to save their wood lot, or some day in the near future will find them in want. One of the most economic methods of obtaining the wood pile is to cut the large trees into lengths just long enough that a pair of horses may handle them comfortably on a drag sled. The limbs and undergrowth are cut into convenient lengths to handle, and not into four-foot lengths, as the machine will do this much cheaper.

Both kinds of wood are drawn to the buildings before being sawed; as the sharp farmer will soon learn that it is better to have his crew of wood sawyers at work on the pile during the time it takes to travel to and from the woods. The men who travel through northern New England with their sawing-machines, carry the facilities for cutting the large as well as the small wood. After the wood is sawed it should be split as soon as possible, or before it has had time to check. The checking would make it split much harder. Throw the wood well up in a pile to season out of doors. Just before haying put the wood in the shed and pile it up nicely. This may be done at odd jobs, and before the farmer realizes it, he has his stock of wood laid up for the next winter's use.

E. S. WHITTEMORE.

Care of Swine.

Penning a sow in close quarters not only tends to disease, but to make her vicious, and, at the same time, to increase the cost of her keeping. The orchard is an excellent place for her, especially if it is in bearing and well seeded to clover. Have storm quarters for her, of course.

In nearly all cases the second and third litter of pigs a sow farrows will be better than the first, and if she is sufficiently valuable to be kept as a breeder she can be kept several years to a good advantage, and will be of much more worth than a young mother.

Two weeks previous to farrowing is soon enough to put the sow upon soft food exclusively, and earlier than this corn can safely be made the chief diet. To make the pigs grow without ceasing, the mother should be fed a ration which will cause her to fatten even while she is suckling.

The Poland-China is a pork producer of the very best quality, and a beauty to look at; bred, fed and improved for generations, he stands today almost a perfect hog, and the peer of any animal which lives when it comes to converting feed into meat.

To get a good start, buy a thoroughbred which has been bred, no matter if she costs the price of two or three scrubs; she will make you more money than half a dozen of the poorer sort. High-bred hogs are hardy, prolific and better feeders, and, with good food and care, return a wonderful profit.

Better feed two lots of pigs in the year to 200 pounds than one lot to 400. Young pigs pay better than the old ones for the feed they eat. Better fatten the pigs than make hogs of them. Light lean pork encourages the use of pork, and stimulates one to the growing of swine.

If you can succeed in getting the aged boar fat, and also the sow of many years, you will find more profit in converting them into lard than in selling them on foot at such prices as animals of this grade usually bring.—Wisconsin Agriculturist.

Swine.

All runts are not born runts, but many have their runtness thrust upon them. In his early life a pig will go backward or forward very easily. Almost every pig will make a good porker if started right. Give a runt a little extra life; a little boiled milk several times a day works wonders.

Clover hay is a good food for breeding swine, especially if run through the cutter moistened and mixed with shorts, or with a mixture of two-thirds shorts and one-third corn meal. The clover is rich in muscle forming material, and it is surprising what an amount will be eaten and digested by a brood sow, when prepared in this way.

The pleasure and profit in growing live stock, especially pigs, is doubled if

CREAM SEPARATORS.

The De Laval "Baby" or Dairy Cream Separators are now made in various different sizes and sizes, to meet all separating requirements, from the household buying its milk to the dairy of from one cow to one hundred. They range in milk-separating capacity from 175 pounds to 700 pounds per hour, and from \$30.00 to \$225.00 in price.



The De Laval machines were first and have ever continued best. Other so-called cream separators are mere cheap, inferior and inefficient imitations. There are now more than 100,000 De Laval machines in use, scattered over every country in the world. Their sales are ten to one of all other makes combined. Satisfaction to the user and demonstrated superiority to every other machine and creaming system is the universal condition of their sale. Send for new "Baby" or Dairy catalogue, No. 257, just out.

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the animals are intelligent and docile; kind treatment pays not only in present pleasure and profit, but in the assurance that each generation will be more gentle and more intelligent than the last, as the result of association and friendliness with gentle men.

If anyone has swine weak in loins or dragging hind quarters on the ground, afflicted with what is known as kidney worms, give them a tablespoonful of indigo in thick slop, twice a day for three days. If not cured, wait three days and repeat the dose. Have never known it to fail of curing in eighteen days. Usually twelve doses cures those dragging their quarters.—Hardy, in N. Y. Farmer.

Judging a Pig by its Hair.

As an indication of the quality of a pig, the hair is made of much value to the breeder or feeder. Fine, silky hair is an indication that the flesh will be fine-grained and of good quality. Coarse, stiff hair is invariably found on an animal slow to fatten and with coarse flesh. The shrewd feeder and the shrewd breeder will reject an animal with coarse hair; such hair usually accompanies a bad disposition. Staring hair indicates an unhealthy condition of the body. By studying the peculiarities of the hair of live stock much of the internal structure and of the disposition of the animal may be learned.

Sheep and Wool Notes.

Where sheepmen believe more in mutton than in fleece, they should show their faith by breeding up with the best mutton bucks. Indeed, when a flock is on this basis it will prove more satisfactory than when the profit depends wholly upon the idiosyncracies of the wool market.

By selling the sheep much annoyance from dogs is avoided. Let the bells be many—two or three dozen sheep—and when they run they will make so much noise that the dogs will be intimidated. The clatter will also draw the attention of the owner, even in the night.

The Shropshire has a round, solid body, and a good fleece of six or eight pounds, is an excellent sheep for a small flock upon the farm, and for domestic use. Its size and the nature of its mutton and wool suit the demand, and it is most often seen at the fairs and in the market.

Separate the pregnant ewes from all the others at least a month before yearling time, and give some bone making food and plenty of exercise. Corn and confinement will make large lambs, perhaps, but with little strength or vitality. The larger the proportion of oats, wheat, bran and clover hay which can be got into the ration the better.

Sheep do not injure the soil, but constantly add fertility. By fastening one and one-half cents worth of wire netting around each apple tree in an old played-out orchard, and pasturing a bunch of sheep there that are well fed and watered, all the weeds and sprouts will be killed, and the old orchard will take on new life. This is the very best way to doctor one of this kind.—Sheep Breeder.

Capacity of Bins and Wagons.

Every boy around the farm of suitable age should be taught how to figure out the number of bushels of wheat and oats in the bin and how much the wagon box will hold. A wagon box ten feet long, three feet wide and twenty-five inches deep will hold 27.8 bushels of ear corn or 50.2 bushels of shelled corn. A crib ten feet wide, ten feet high and sixteen feet long will hold 711 bushels of ear corn. Of ear corn one bushel is contained in two and a quarter cubic feet.

In figuring shelled corn and grain the same space will hold one and four-fifths times as much grain as it will of ear corn. A crib that will hold 800 bushels of ear corn will hold of shelled corn or other grain 1440 bushels.—Stockman and Farmer.

Stock and Dairy Notes.

Continue feeding the milk cows for some time after turning on the pastures. Milk is elaborated from the blood as it passes through the glands of the udder.

Souring milk is a process of thickening, which finds its complete fulfillment in lopped milk.

A writer says \$5 worth of bran is worth \$35 worth of dog to bring the cows home, and we believe him.

A prominent dairy journal states that "if tuberculosis is a germ disease, as all authorities have come to accept, then it cannot be hereditary."

Oleomargarine has displaced \$88,000,000 worth of pure butter in the United States. How much has it enhanced the price of beef tallow, its chief ingredient?

The Michigan Legislature has passed a bill prohibiting the coloring of oleomargarine to the resemblance of butter. All praise to the legislators of Michigan.

Many calves that do not thrive on skim milk, have had their digestion disturbed by irregular feeding in hours and quantity, and by feeding milk cold or sour, in unclean pails or feed boxes. It pays to be thoroughly neat in feeding all young animals.

What is claimed as the champion dairy cow of the world is a Shorthorn named Honeycomb, bred by John Lindsay, of Kimble Park, Unamodanor, New South Wales, Australia. The record claimed for her is 84 1/2 pounds of milk in 24 hours, yielding four and a fourth pounds of butter.

Calves intended for the dairy ought never to be fed in such a manner as to accumulate fat or to establish a predisposition to lay on fat. They need food that will form bone and muscle to expand their frames and fit them to take and digest large quantities of food during their future lives.

To Remove Placenta: Give one to one and a half ounces fluid extract of cotton root, in about three ounces of tepid water. As soon as the cow gives evidence of straining, insert the right hand and follow the placenta to the end, and pull upon the outer end with the left hand. Lard the hand and arm and have the labor pains act together.

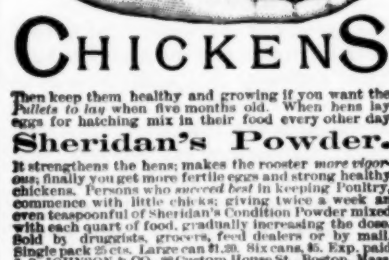
One of the first things a calf should learn to eat is good sweet clover hay. Keep it before them in a good rack, with fresh supply every day. Scouring means indigestion, usually the result of overfeeding, but sometimes from sour feed. To cure, reduce the feed, bold the milk, give raw eggs, and remove the cause. Remove the droppings of scouring calves, as they are full of the germs of the disease.

In 1850 the average annual yield of milk per cow in the United States was only 1400 pounds; in 1890 it had increased to 2600 pounds. Although to be successful the yield should be at least 5000 pounds or very nearly double the average yield. As nearly as can be estimated at present, the earnings of cows on the Pacific Coast, where the milk has been taken to the creameries or cheese factories during the last year, have been \$27.20 each, and in Kansas \$7.70, while the labor and feed necessary to keep a cow is not less than \$30 per annum. In Canada the returns from cows, where the milk is sold to cheese factories, varies from \$9.96 to \$65.50 per cow annually.—Colman's Rural World.

THE man who has no silo should raise roots. Mangels and carrots are two fine root crops for dairy cows. They should be sown this month. The mangels are probably best for quantity of milk and carrots best for quality. The latter are fine for butter production. Sow both crops upon strong, rich land, well manured with old rotted dung.

HATCH Strong

Then keep them healthy and growing if you want the pullets to lay when five months old. When hens lay eggs for hatching mix in their food every other day



CHICKENS

Then keep them healthy and growing if you want the pullets to lay when five months old. When hens lay eggs for hatching mix in their food every other day

Then keep them healthy and growing if you want the pullets to lay when five months old. When hens lay eggs for hatching mix in their food every other day

Corn

is a vigorous feeder and responds well to liberal fertilization. On corn lands the yield increases and the soil improves if properly treated with fertilizers containing not under 7% actual

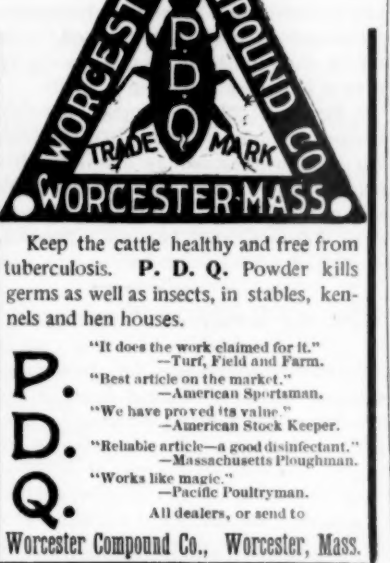
Potash.

A trial of this plan costs but little and is sure to lead to profitable culture.

All about Potash—the results of its use by actual experiment on the best farms in the United States—is told in a little book which we publish and will gladly mail free to any farmer in America who will write for it. GERMAN LARK WORKS, 23 Nassau St., New York.

A Stable Disinfectant

A Reliable Insecticide



Keep the cattle healthy and free from tuberculosis. P. D. Q. Powder kills germs as well as insects, in stables, kennels and hen houses.

"It does the work claimed for it."  
—Turt, Field and Farm.  
"Best article on the market."  
—American Sportsman.  
"We have proved its value."  
—American Stock Keeper.  
"Reliable article—a good disinfectant."  
—The Poultryman.  
"Works like magic."  
—The Poultryman.  
All dealers, or send to  
Worcester Compound Co., Worcester, Mass.

CHICAGO

Gluten Meal.

THE GREAT CONCENTRATED DAIRY FEED!

The safest and best feed for milk cows. Recommended and endorsed by Massachusetts State Agricultural Experiment Station. This standard milk-producing feed has been on the market fifteen years and has a large annual sale. For sale by leading grain dealers. Samples and descriptive circular sent on application.

Norton-Chapman Co., N.E. Agts, Boston

HAY FOR COWS

AT \$6 PER TON

Would be very cheap, but I have some feed at \$6 per ton that is as rich as hay. You must feed only a small quantity, and making up the required bulk, or number of pounds, with my feed at \$6 PER TON. Cash sent a sample by mail, but will ship 300 lbs. as a sample on receipt of one dollar. I will send a car load of 17 tons for \$100, cash with order, and will pay the freight to most points in New England. Better be quick and take a car of it.

C. A. PARSONS, 154 Commercial St., Boston, Mass.

Knife Cut Weeder.

The best tool on earth for shallow culture. Particularly adapted for market gardening.

ALSO STRAWBERRY PLANTS FOR SALE

S. H. WARREN, Weston, Mass.

RELIABLE SEEDS,

Bulbs, Plants, etc.

Catalogue Free to All.

R. & J. FARQUHAR & CO., 16 & 19 South Mark St., Boston



999,999 Strawberry Plants at prices that will sell them. Also Novelties in Hardy Vines and Climbers. Water Lilies (all colors), Celery Plants, Asparagus, Rooks, etc., etc. Send for my illustrated Catalogue before ordering elsewhere. I have a reputation of thirty years as a grower. C. S. PRATT, Reading, Mass.

DO YOU FEED FOR PROFIT?

FLIES MILK SHOO-FLY

Those who are so fortunate as to have Page fence in use will usually find it intact after the winter season. If the posts are washed out, it will need re-stretching, and you should notify us at once. See April "Hinter" for latest food test. PAGE WOVEN WIRE FENCE CO., Adrian, Mich.

Worth of 35c. Sweet Peas 35c. FREE

OUR RAINBOW COLLECTION.

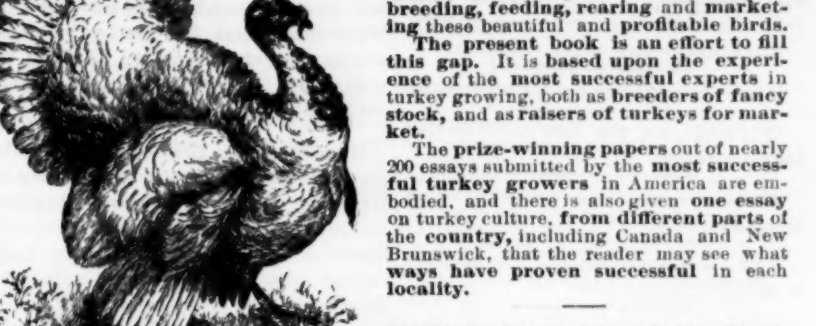
Out this COUPON out and mail it to us with only 25 cents, and we will send you one FULL SIZE PACKAGE of each of ten named varieties: our selection, including Cupid the only dwarf sort; in this collection you get all the colors and shades of the rainbow; worth at catalogue rates 50 cents. Send To-day.

ROSS BROTHERS, 162 Front St., Worcester, Mass.

HARDY ORNAMENTAL TREES, SHRUBS, VINES, EVER-GREENS, AND HARDY HERBACEOUS PERENNIALS.

The finest general assortment of Hardy Ornamentals of all Plants in America. 200 pages illustrated descriptive catalogue on application. Plans and estimates furnished. Send list of needs for special rates. THE READING NURSERY, JACOB W. MANNING, Proprietor, READING, MASS.

TURKEYS. How to Grow Them.



No book in existence gives an adequate account of the turkey, its development from the wild state to the various breeds, and complete directions for breeding, feeding, rearing and marketing these beautiful and profitable birds. The present book is an effort to fill this gap. It is based upon the experience of the most successful experts in turkey growing, both as breeders of fancy stock, and as raisers of turkeys for market.

The prize-winning papers out of nearly 200 essays submitted by the most successful turkey growers in America are embodied, and there is also given one essay on turkey culture, from different parts of the country, including Canada and New Brunswick, that the reader may see what ways have proven successful in each locality.

Profusely Illustrated. Cloth, 12mo. Price, postpaid, \$1.00.

Ploughman, Boston.

POULTRY.

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and pay for it before giving it a trial. The firm that is afraid to let you try their incubator before buying it, has no faith in their machine. We will sell you ours on TRIAL. NOT A CENT until you win your first steady customer if you will only buy ours on trial. Our large catalogue will cost you 5 cents and give you \$100 worth of practical information on poultry and incubators and the money there is in the business. Plans for Brood-ers, Houses, etc., 25c. N.B. Send us the names of three persons interested in poultry and 25 cents and we will send you "The Bicyclist's Guide to Care and Repair," a book of 80 subjects and 80 illustrations, worth \$5 to any bicycle rider.

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HATCH Chickens BY SYSTEM

Simple, Perfect, Self-Regulating. Thousands in successful operation. Lowest priced. Retained for 10 years. Send for circular. 111 & 112 E. 12th St., Phila., Pa.

ROSS BROS., Worcester, Mass. Agents for this Territory.

YOUR HENS are lonely unless you do

Use Lambert's Death to Live to keep them clean and comfortable. It is a disinfectant insect powder for poultry rooms, etc. Book free. Sample 10c. 10c. extra. D. J. LAMBERT, Box 315, Appanage, N. Y.

One Boy's Success

This 15-year-old boy owns and manages a successful poultry business. Beginning with seven chickens he has now a large, successful flock of pure-bred fowls. He won seven premiums at the Boston Poultry Show, Jan. 1896. There is no business he can carry on with more profit than poultry raising. Every town or country boy can learn how to make money by studying carefully the pages of

Farm-Poultry.

It is a practical teacher and guide to successful poultry-raising. Published twice a month. Price \$1.00 a Year; 50 cts. for Six Months. Send 12 cts. for sample copy containing an article on the boy poultry breeder and his success. Also a 25 ct. book, A Living from Poultry. L. J. LAMBERT, 22, Centre Street, Boston, Mass.

SEPARATOR BARGAINS

I have on hand and for sale a large number of SECOND HAND CREAM SEPARATORS. Of various sizes and different makes. These machines are in first class condition, having just come from the repair shop. Address: P. O. BOX 856, Philadelphia, Pa.

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We have a good opening for a few live salesmen. We pay salary or commission. Write us for terms. W. D. CHASE & CO., Nurseriesmen, Malden, Mass.

RHEUMATISM

Positively cured by wearing our Electro-Magnetic RING. Sold by MYSTIC WATCH CO., 353 Washington Street, Boston. Sent by mail on receipt of one dollar.

A GOOD WATCH! GUARANTEED A per cent timekeeper. By mail for \$1. MYSTIC WATCH CO., 353 Washington St., Boston. Send for circular.

MOSELEY'S OCCIDENT CREAMERY

FOR TWO OR MORE COWS. PERFECT CREAM SEPARATOR. HOSLEY & FRITCHARD MFG. CO., CLINTON, IOWA.

INSURANCE.

Quincy Mutual Fire Insurance Co. INCORPORATED IN 1851. COMMENCED BUSINESS IN 1851. CHAS. A. HOWLAND, WILLIAM H. FAY, President, Secretary.

CASH FUND JANUARY 1, 1896, \$611,608.08. SURPLUS OVER ALL LIABILITIES, \$360,000.00. AMOUNT AT RISK, \$34,000,000.00. Losses paid in 1895, \$46,682.24. Dividends paid in 1895, \$72,360.57.

OWNERS of FARMS

If You are desirous to SELL, RENT, OR EXCHANGE

Your farm, WITH OR WITHOUT privilege of buying, now is the time to come with us. We are constantly having calls for such, and make a specialty of FARM PROPERTY. Send full particulars to

MASS. PLOUGHMAN OFFICE,

For Sale by Mass. Ploughman,

HOTELS.

THE American House

Hanover St., Near Adams Sq., BOSTON.

The Nearest LARGE HOTEL to the Northern and Eastern Stations. C. A. JONES, Proprietor.

THE BEST PEOPLE from every-where, bent on business or pleasure, when in New York, stop at

The St. Denis.

The cuisine and comforts of the hotel have become so well known that its name is now a household word in thousands of homes in this country and Europe.

Central Location: Broadway and Eleventh St., Opposite Grace Church, NEW YORK.



# MASSACHUSETTS PLOUGHMAN

BOSTON, MAY 1, 1897.

Persons desiring a change in the address of their paper must state where the paper has been sent as well as the new direction.

ROTATION brings larger crops.

DAIRYING produces quick cash returns.

It is lucky for the best farmers that they are so few.

BUYING "on tick" has been the ruin of many a farmer.

MAKE things convenient. Convenience is the oil of farm life.

To get behind the season means some badly done work in catching up.

PROFESSOR MAYNARD's article incidentally gives solid instruction about peach growing.

THE man who tries every new thing is a public benefactor; sometimes, however, at his own expense.

THE hardest practical lesson for the fruit farmer to learn is that it pays to thin out a heavy crop of fruit.

THE garden patch should do double work. Have it rich and clean, and make the most of it grow two crops.

No fruit grower should order nursery stock without first reading the March fruit bulletin of the experiment station at Amherst.

ILL success follows poor work, and both are discouraging. Beginning in season and not attempting too much, insures best results under the circumstances.

FARMING is becoming a business of very close margins. The profit comes more and more from shrewd buying and selling and less from tucky crops or specialties.

QUITE as important as the farmer's energy and muscle are his wife's brains and good sense. Many a stupid farmer has been pushed into success by a smart, ambitious wife.

DON'T yield to the temptation of low-priced land. Rich, level and fairly moist is the cheapest. Poor soil must be covered with dollars to bring it up to standard. Rich soil will pay its own interest.

It is a great relief to call a man who keeps well up to the times a "crank," but the safer plan is to watch him quietly and closely, and find out whether there is anything to be learned from his successes and failures.

OH, the valuable time in planting season that has been wasted in working up stove wood! How the stuff duffs the saw and how it resists the axe. Meanwhile how the early crop suffers and the weeds grow. Remember how you feel about it now, when next winter comes.

FARMER SLACK chewed and smoked with great vigor last year. He spat and puffed up enough money to have planted a young orchard, or to have started a little farm library. Fortunately that Mrs. Slack has no such costly tricks.

FARMERS' institutes are the most helpful development of recent years. They are becoming more numerous every year, and better and more practical speakers are provided. A good institute stirs up a neighborhood like yeast in the dough.

PERMANENT improvement of the farm is half the profit. So long as the farm is growing better, the owner need not complain, even though his bank account fails to grow. In the long run it will pay better to neglect the bank account than the farm. When farm and stock are at their best, then it is soon enough to invest the surplus elsewhere.

FARMER SNUG tried rolling two acres into one on a small part of his farm. That is, twice the usual amount of preparation of the soil and double the ordinary ration of manure. The result was the best crops he ever had, and he says he will do it again. Of course by this plan some of the land gets no manure at all. He merely allows the surplus land to stay in grass another year. Last year he planted an acre of potatoes with fertilizer alone, and did so well despite low prices that he will plant the same amount in the same way this year.

MR. N. I. BOWDITCH, owner of Millwood Farm, has recently procured a pasteurizing apparatus. He gets four cents extra per quart at retail for pasteurized or sterilized milk and five cents extra for pasteurized cream. These products are put up in glass cans and placed on sale in the stores. This enterprising plan will probably be followed by other milk vendors who cater to a high grade of custom. There are some in every large town who will buy pasteurized products when offered a chance, and who will pay well for the extra labor and expense.

DEAFNESS CANNOT BE CURED

By local applications, as they cannot reach the diseased portion of the ear. There is only one way to cure deafness, and that is by constitutional remedies. Deafness is caused by an inflamed condition of the mucous lining of the Eustachian Tube. When this tube is inflamed you have a rumbling sound or imperfect hearing, and when it is entirely closed, deafness is the result, and unless the inflammation can be taken out and this tube restored to its normal condition, hearing will be destroyed forever. Nine cases out of ten are caused by catarrh, which is nothing but an inflamed condition of the mucous surfaces.

Will give One Hundred Dollars for any case of Deafness (caused by catarrh) that cannot be cured by Hall's Catarrh Cure. Send for circulars, free.

F. J. CHENEY & Co., Toledo, O.

Sold by Druggists, Etc.

## TOPICS OF THE WEEK.

Business conditions have made no particular gain during the past week. The volume of trade is small, and with the exception of woollens and boots and shoes, sales have been slow. Exports of flour and wheat continue liberal. Nothing but the delay of the tariff bill keeps the country waiting. With that matter settled, merchants and manufacturers will know upon what they must reckon. While the general situation has by all accounts somewhat improved, there is no warrant for the assertion that good times are fully restored.

More dangerous than bad roads are the lazy, thievish, dangerous scamps who infest them. Now that the towns begin to realize what a drawback to the country districts lies in the tramp nuisance, some communities are energetically trying the labor cure. At Sherborn, according to a correspondent of the local paper, the tramps who apply for lodgings "are made aware of the fact that they will be required to work the next morning three hours for their keeping, with a cup of coffee and a little lunch. A few do not relish the terms and move on to some other town, where no work is required of them, while others put up for the night and in the morning are set to work grading around the new almshouse, and doing work on the grounds. They are watched by the warden, who sees that the work is done properly. When the work is all done about the buildings in this manner, it is proposed to haul a number of cords of wood to the farm and set the tramps to cutting it up. There are also a lot of big stones on the place, that can be dug around and buried up, when there is nothing else for them to do. Most of the "Knights of rest" do not fall in love with the work plan and probably tell all their cousins and uncles on the road what a poor "stop" Sherborn is." The result of this plan has been a great reduction in the number of tramp lodgers. It is now a well-settled conclusion, from experience in this country and abroad, that the work treatment is the most sensible and effective method of meeting the problem.

The famous Andre balloon expedition, which was given up last year because of contrary winds, will be attempted again about the first of July, starting from Spitzbergen with a party of three Swedish balloonists and explorers who will seek the north pole.

Canadian authorities have been requested to make known to the people of the British possessions to the north the fact that this expedition is to start, and to cause them to render the expedition all possible assistance when it arrives in their vicinity. Several other polar expeditions by less unusual methods are projected.

WHEAT prices have been rising under the stimulus of a possible war demand from abroad. During April the rise has amounted to ten or eleven cents a bushel. The war between Greece and Turkey will have but little practical effect upon the demand, but if other nations are drawn into the struggle the result would be conspicuous. Part of the advance is doubtless owing to reports of unfavorable crop conditions in Illinois, Missouri, Indiana and other sections of the central West. Corn is also higher, largely as a sympathetic movement with wheat. When the price of wheat reaches a certain limit consumers use a greater proportion of corn, and the price of the latter cereal advances.

A lively anti-barley crusade is in progress in Aroostook County, Maine. The large Jones breweries of Portsmouth, N. H., have always used Canada barley for beer-making, but it was decided that Aroostook County could produce the same quality of grain and several carloads of seed were shipped into the county for distribution among the farmers. A storm of protest has followed. The Houlton Grange, which took the initiative, issued a set of resolutions condemning barley raising for beer-making purposes. They also pledge themselves to refuse to raise barley for Mr. Jones's breweries. Furthermore, the grangers in other parts of the county, in scores of towns, have joined with the county's temperance league, and have started a crusade against the project. Clergymen have preached sermons on the subject. As a result it seems doubtful whether much of the grain will be produced.

At last the blame of the great gas explosion in Boston has been determined. The decision is that of Judge Ely of the Municipal Court, who finds the Boston Gas Light Company guilty of negligence gross and inexcusable. This decision is of course only the opinion of one man and may not be sustained by the commission or by higher courts. Future developments also may tend to divide the responsibility. But as the matter now stands the gas company is liable for suits aggregating an enormous sum for injuries received by victims of the disaster.

The fortune of war has proved decided ly adverse to the Greeks, and the general opinion seems to indicate a speedy end to the war with terms of peace more or less unfavorable to the vanquished. The loss of Larissa was a severe blow to Greece, and almost a riot occurred at Athens upon receipt of the news. The fleet and the uprising in Bulgaria, Albania and Macedonia now constitute the best hope of the Greeks. There is still great disorder at Athens.

The root of the burdock is said to be extensively used as an article of food in Japan, thousands of acres being devoted to its cultivation. The tender shoots are boiled with beans, the roots are put in soup, and the young green leaves are eaten as greens. The plant has been cultivated for centuries, and the annual value of the crop is about \$400,000.

## Mass. Cattle Commission.

The result of the autopsy of the one hundred and forty Dracut cattle condemned and slaughtered at Brighton before the special Mass. legislative committee, was to the effect that all except three were plainly diseased; two of the three were found diseased upon examination with the microscope, and only one finally remained doubtful. The committee have not yet reported.

The testing of the cattle by private veterinarians is still going on, but to a lessened amount, for the reason that the Commission is doing everything in its power to discourage such testing. Tests made by private veterinarians are not now accepted by the Board, but all cases are retested by an agent of the Commission. This plan tends to discourage this kind of testing, because of the delay and trouble involved.

A special agent of the Commission is travelling in the wake of the testing to do what he can to secure the proper disinfection of disinfected barns. Some of the private veterinarians are supporting the sanitary requirements of the Commission, while others are less particular. The Board wishes to keep the matter within its own control as far as possible. Most of the work of the annual inspection will probably have been completed by the first of the month, and some testing by voluntary request may then be made.

So far, April 28, the number of cattle reported for quarantine is 5490, of which 3340 were condemned as diseased. Reports of 1651 examinations after slaughter have been sent in. Of these 1511 were found diseased, and 140 not diseased. Per cent of failure about 8.48.

## Getting Ready at Worcester.

The Bay State Grange Fair is already beginning to occupy a good share of the attention of agricultural Worcester. Sec. J. B. Bowker states that in addition to the prizes announced for grange exhibits, it has been voted to give to first, a mowing machine, second \$25, and to third \$20. For the best designs for grange exhibits, premiums of \$20, \$15 and \$10 will be given.

It has been decided to give \$800 for prizes for the bicycle day of the fair, and Charles G. Percival was elected official handicapper.

For exhibits of woods, premiums of \$25, \$20 and a set of tools will be given; for largest pumpkin \$10, \$8 and \$6, and for domestic cheese, \$20, \$15 and \$10. President Jewett, Secretary Bowker and L. F. Herrick have been appointed a committee to select judges.

## Bribery by Oleo Men.

Oleo has indirectly caused quite a sensation in Colorado. The manufacturer tried to engineer a favorable bill through the Legislature, and was, it appears, not at all particular as to the means employed. Governor Adams made an investigation and vetoed the bill. The veto message is sensational in the extreme, as the governor includes in his message a letter from a Denver lawyer to an oleo-margarine manufacturer in Chicago, showing that the bill was passed by means of the most open and most barefaced bribery in both House and Senate. The bill provided that the oleomargarine could be sold, but that no coloring matter could be used. The governor withholds the names used in the letter, which was written to urge the manufacturer to send \$150 as his share of the amount needed to insure the passage of the bill. It was stated that local dealers had already contributed and that manufacturers in Kansas City and Indianapolis had agreed to do so. This disclosure, if sustained, will prove a terrific setback to the bogus butter men.

Country Real Estate.

F. F. Nye has sold a fifteen-acre farm, stock and tools, on the Eastern road, Mansfield, to J. Frank Bell of Ashland.

W. J. Craigs, of Onset, has bought the Tuttle farm of fifty acres at Alstead, N. H.

The Cummings estate in Wrenham, comprising a frame house, stable, and six acres of land, has been sold to Peter Jones, a dealer in Texas ponies. He has begun making extensive improvements in the property.

One of Framingham's landmarks has changed hands, the purchaser being Thomas H. Chubb of Newton Highlands, a reputed millionaire. This estate is the farm occupied for years by the late Andrew S. Furber, and it comprises about 50 acres of land, with a dwelling house and other buildings.

The well-known Forbes farm, situated half way between South Framingham and Sherborn, recently occupied by one Kelly, has been placed in the hands of a Boston syndicate, and is now being sold for house lots. The estate comprises sixty-four acres, and all the land, upland and lowland, pasture and meadow, has been cut into lots, about 1000 in all.

The successful utilization of Niagara's gigantic power has led engineers in all parts of the world to endeavor to similarly harness others of Nature's great dynamos. In Egypt, Professor Forbes, the electrician, has been examining the cataraacts of the Nile, and finds that they can provide sufficient power to pump the river water over the adjacent fields and even to supply motive power for running factories at a distance.

Fair reader, if you are a victim of Rheumatism, seek relief at once. By sending to the Mystic Watch Co., 333 Washington street, ORE DOLLAR, they will remit to you an Elettro-Magnetic Ring, by wearing which a positive cure is made possible.

It seems quite necessary that every person should be the possessor of a TIME-KEEPER, and particularly so when a watch that will keep good time can be had for only One Dollar. Write to the Mystic Watch Co., 333 Washington street, and by return mail they will send the watch.

## 6% Iowa Farm Mortgages

Are Universally Accepted as the Safest and Best. We have handled them for 20 years without loss.

ELLIS WORTH & JONES,  
Established 1871. Iowa Falls, Iowa.  
Chamber of Commerce Bldg., Chicago.  
208 Tremont Bldg., Boston, Mass.

## Birds

AS AN ELEMENT IN AGRICULTURAL EDUCATION.

Birds play such an important part in agriculture that a thorough knowledge of them, and especially of all the insectivorous birds, is of great importance to the farmer. How many farmers are there today who know how to distinguish their friends and enemies among the feathered tribes? How often do we not see farmers who are good, successful tillers of the soil, ruthlessly persecute their best friends among the insect eating birds, simply because, beside the tens of thousands of obnoxious insects that they annually rid the farm of, they occasionally also take a grain or pick a berry? All this wanton destruction becomes very expensive in the end, because, when the birds are gone, different and more costly remedies have to be resorted to in order to keep a whole-some check upon our pestiferous insects. It all results from a defective knowledge of who are our friends and who are not, among the birds.

Our agricultural colleges, which are doing excellent work in bringing forth a generation of really skilled and, both theoretically and practically, well educated farmers, appear, according to the printed curriculum of the courses, to have no proper text books covering this field. It is true, that until quite recently our literature has been wanting in a really good text book with natural colorations upon this subject, and the two books upon birds published, one by the state of Pennsylvania with some colored plates, the other by the state of Michigan without any colorations, are both more or less local and, not appearing in the market, obviously unavailable as test books. But recently there has appeared a re-issue of Nuttall's "Handbook of Birds" with numerous figures and 110 remarkably lifelike colored representations of our most important birds.

The text having been carefully revised and annotated by no less an authority than Montague Chamberlain of Cambridge, the work now certainly possesses all the qualifications that could be desired in a first-class text book upon this subject. Its general adoption as a part of the curriculum in our agricultural colleges should unquestionably be followed by residents very beneficial to all our farmers, and indirectly to the entire population. Nuttall's "Handbook of Birds," and George B. Emerson's "Trees and Shrubs of Massachusetts," with its vivid descriptions and splendid pictures of large trees and shrubs, should be found in every family, and especially should they constitute an important and conspicuous part of every farmer's library.

With our trees fast disappearing and our bird friends ruthlessly persecuted, we shall soon reach a point where profitable farming will be a high impossible, and the sooner effective steps are taken to remedy this unfortunate state of affairs the sooner we shall be able to enjoy the benefits which invariably must follow a rational amelioration of these anomalous conditions.

## Nature-Study for Public Schools.

Nature-study, or seeing familiar things in a new light, is a valuable factor in education. How many people can explain, so that a child can understand, why water puts out fire, why some young squash plants bring their shells out of the ground on their backs and others do not; or show the difference between a leaf-bud and a fruit-bud of the apple; or tell from whence all the house flies come? The world is full of such common things, about which people do not inquire. Yet, such subjects can be made very interesting to children and they can be taken up in the schools, not as an added recitation, but as a rest exercise once or twice each week to relieve the monotony of the school room and later be made the theme for a language exercise. Here are two important faculties that may be brought into exercise, accurate observation and the power of expressing definitely what is seen.

The College of Agriculture of Cornell University, has, under the Nixon or Agricultural Extension bill, undertaken to assist, free of expense, all teachers who wish to introduce this work into their schools. All parents and teachers interested in this work are asked to send their address for more detailed information to Chief Clerk, College of Agriculture, Ithaca, N. Y.

GERMAN scientists have recently furnished information in regard to the ages of trees. They assign to the pine tree 500 to 700 years as the maximum, 425 years to the silver fir, 275 years to the larch, 245 years to the red beech, 210 to the aspen, 200 to the birch, 170 to the ash, 145 to the elder and 130 to the elm.

Fair reader, if you are a victim of Rheumatism, seek relief at once. By sending to the Mystic Watch Co., 333 Washington street, ORE DOLLAR, they will remit to you an Elettro-Magnetic Ring, by wearing which a positive cure is made possible.

It seems quite necessary that every person should be the possessor of a TIME-KEEPER, and particularly so when a watch that will keep good time can be had for only One Dollar. Write to the Mystic Watch Co., 333 Washington street, and by return mail they will send the watch.

## Read and Run.

The New York Legislature has finished its session and adjourned.

The strike of the steam-fitters and helpers in New York has been settled.

The free list of the Dingley tariff bill has been largely increased by the Senate committee.

Trouble exists between American and Canadian miners on the border of Alaska.

Portland, Maine, and Somerville in this State seem to be afflicted with incendiaries.

Captain John Stearns of Rockland, Maine, shot his wife Monday afternoon with probably fatal results.

The Mississippi river is again rising, and the Des Moines river has caused suffering in Ottumwa, Mo., by its quick rise.

Joseph E. Kelly, the Somersworth, N. H., murderer, has been lodged in jail at Dover. He is confessed and plead guilty.

The opening up of a Southern route to the Gulf for grain from the West is greatly injuring Chicago as a grain centre.

An infant daughter of John F. Buckley, of Des Moines, Ia., was choked to death by her bonnet strings catching in a tree.

The death is announced of Theodore A. Havemeyer, the millionaire vice president of the American Sugar Refining Company.

Professor Lawrence Brume, of the University of Michigan, has sailed for the Argentine Republic to investigate the grasshopper pest.

Five moonshiners who had been terrorizing the people of Virginia and Tennessee are said to have been killed by citizens of Rikessville, Ky.

The Berlin Iron Bridge Company have the contract for furnishing for the government of Limon, Costa Rica, a market building constructed entirely of steel.

Additional warrants have been sworn out against Frank H. Hadley, ex-president and ex-treasurer of the Bennett and Columbia Mills, at New Bedford, Mass., charging him with perjury.

Through an engraving clerk's mistake the Maine game commissioners are having no end of trouble with the game laws, and other important errors have been discovered in various laws.

Fire, Sunday, at North Attleboro, totally destroyed two buildings, a stable and warehouse belonging to John Welch, badly damaged two and partly ruined another, causing about \$4000 loss.

Sunday night a severe earthquake, lasting twenty seconds, was felt at Cairo, Ill. The largest structures were shaken with a swaying motion, and people rushed in terror to the streets. No damage has been reported.

Policeman James E. Pierce of the Washington force, who came from Vermont and has been on the force four years, was arrested Monday for robbing two houses on his beat, in the fashionable residence section.

Charles Warren Spalding, president of the broken Globe Savings Bank of Chicago, and, until the crash, treasurer of the Illinois State University, was sent to jail Saturday in default of \$25,000 bail. He is charged with embezzling \$100,000.

W. A. Jordan, a member of a theatrical troupe, was drowned near Oldtown Island, Maine, Monday afternoon by the overturning of a canoe. Jordan was out with an Oldtown youth named Hellenbrand, and attempted to shoot the rapids.

The mills of B. B. & R. Knight, in the Pawtuxet Valley R. I., which were shut down for one week, started up on full time this week. The mills constitute the largest system in the State, and provide employment for thousands of operatives.

Set of 12 Portfolios, 16 full page photos each 13 x 2 x 11, 192 pages in all, subject, "Beautiful Paris," edition cost \$100,000, given absolutely free with beautiful album, by Dobbins Soap Mfg. Co., Philadelphia, Pa., to their customers. Write for particulars.

Horrible confessions have been made to the authorities by two Indian boys, Paul Holytrack and Philip Ireland, who acknowledge that they were at the Spicer place on the day of the murder of the Spicer family, near Winona, N. D. The boys also implicate the two half-breeds, Black Hawk and Caddette, who have been under arrest. The Indian boys say that the murder was planned some weeks before it was committed, and that Black Hawk was the leader. It is more likely that all four will be lynched, as excitement is running high.

## Mass. Horticultural Society.

At Horticultural Hall, last Saturday, Hon. Aaron Lowe exhibited dandelions and rhubarb; Warren Heustis & Son, dandelions, and James Conley a fine dish of mushrooms. Gratuities were awarded by the vegetable committee to these three contributors.

A collection of eighteenth-century native plants was shown by Mrs. P. D. Richards, and there were other floral exhibits.

Today, May 1, prizes are offered for pearlygonus, Indian azaleas, calceolarias, orchids, streptocarpuses, and cut flowers of tulips, narcissuses, pansies and native plants, and a variety of vegetables.

"UP-TO-DATE DAIRYING," is the title of a free pamphlet issued by the De Laval Separator Co. of New York. It purports to impart a practical education in the varied advantages of centrifugal separation, and of course also tells about the De Laval machines.

"Not Exactly Right." Thousands of people are in this condition. They are not sick and yet they are by no means well. A single bottle of Hood's Sarsaparilla would do them a world of good. It would tone the stomach, create an appetite, purify and enrich the blood and give wonderful vigor and vitality. Now is the time to take it.

HOOD'S PILLS cure nausea, sick headache, indigestion, biliousness. All druggists. 25c.

FOR CORN

"Farmers who have used commercial fertilizers have, as a rule, bought fertilizers containing phosphates but little or no potash."—Bulletin No. 14, Hatch Experiment Station, Massachusetts.

The relative deficiency of potash in many of our soils demonstrates that this element in fertilizers is of vital importance in the culture of corn. That Essex Corn Fertilizer is rich in potash is shown by its guaranteed analysis.

Gentlemen—Your Corn, Grain and Grass Fertilizer, after a thorough trial, has proven to be the best Fertilizer for these crops I have ever used—and I have used nearly all the leading brands.

Yours truly, F. P. BABCOCK.

WESTERLY, R. I., Oct. 23, 1896.

"How to Raise Good Crops on a New England Farm" will be mailed you on application. It will pay you to send for it.

RUSSIA CEMENT CO., Gloucester, Mass.

## Literary Notes.

"CAPTAIN MOLLY: A LOVE STORY," by Mary A. Denison, author of "That Husband of Mine," "That Wife of Mine," "Tell Your Wife," etc. Mrs. Denison is known throughout this country and Great Britain as the author of several successful novels, among them being "That Husband of Mine," which attained a remarkable circulation a few years since. "Captain Molly" is a decidedly different vein from her previous work, it being a very strong story of the affections with many dramatic situations; indeed, it is now being dramatized for early presentation in New York. The scene is laid among the East Siders of New York, but the characters are not all drawn from that classic locality. A leading New York daily says: "Mary Denison has written many pleasant tales that have been widely read, but her 'Captain Molly' is a surprise. It is a love story of the Salvation Army—as sweet a love story as was ever told—which must have been written with every nerve vibrating under the spell that impels men and women to offer up their lives as daily sacrifices to save the weak and erring. It does not preach; it idealizes only, as the true artist should. But it will make every man and woman better for the reading." Price, \$1.00.—Boston: Lee and Shepard.

In the May number of Appleton's POPULAR SCIENCE MONTHLY Prof. W. Z. Ripley discusses the stature of the populations of Europe as related to race and other factors, and presents maps showing the precise locations of communities of long and short people. He also shows how the environment and artificial selection have important influence in modifying the average stature of populations.

The May number of MCLURE'S MAGAZINE is especially abundant and interesting in the matter of portraits of famous people. An article that everybody will read with interest is Baker's account of the pursuit and capture of Booth, after his assassination of Lincoln, and of his death and burial. Other features of this number of MCLURE'S are a most intelligent and comprehensive review of the second administration of Mr. Cleveland, by Carl Schurz; an account of Grant's disheartening search for service at the beginning of the war, by Hamlin Garland; and fiction of the most romantic and stirring quality by Conan Doyle, Robert Louis Stevenson, and Rudyard Kipling.—New York: The S. S. McClure Co.

HARPER'S for May opens with "Cross-Country Riding in America," by Caspar Whitney, illustrated by C. Dana Gibson and others. "A Few Native Orchids and their Insect Spent-ors" is a study of cross-fertilization, written and illustrated by the late William Hamilton Gilson. "White Man's Black Man," the seventh of Poulton Bigelow's series entitled "White Man's Africa," is a study of the African negro as a laborer. "The Hundred Years' Campaign," by Prof. F. N. Thorpe, is a study of the development of our political parties. In the eighth installment of "The Martian" the mystical implication of the planet Mars is fully developed. The short stories are "The Captured Dream," a study of domestic life, by Octave Thanet; "The Education of Bob," by Rebecca Harding Davis; "The Lion-Tamer," by Henry Gallup Paine; and "A Guardian Angel," by Harriet Prescott Spofford, illustrated by W. T. Smedley.

In the REVIEW OF REVIEWS for May the editor discusses the outbreak of the war between Greece and Turkey, and the failure of the "concert of Europe," which he ascribes to Lord Salisbury's "process of parley."

The HARPER'S will publish on April 26: "The Missionary Sheriff," by Octave Thanet; "A Loyal Traitor," by James Barnes; "Flowers of Field, Hill and Swamp," by Caroline A. Creevey; a new edition of "John Ha Ha, Gentlemen," by Miss Mulock; "Leonora of the Yaw," by Francis Dana; and a new edition of Samuel Johnson's "Alexander Pope," edited by Kate Stephens.

THE CENTURY for May contains a group of three papers dealing in an authoritative way with a fresh topic—the scientific use of kites. Mr. J. B. Miller writes on "Scientific Kite Flying" with special reference to the experiments at the Blue Hill Observatory near Milton, Mass. Lieut. A. D. Wise, U.S.A., makes a record of his own experiments on Governor's Island, including an account of his ascent—the first in America, and the most notable yet made. Mr. William A. Eddy writes of "Photographing from Kites," giving an account also of his experiments in telephoning and telegraphing through lines suspended from kites—the first known experiments in the sort. Affairs in the East are treated in an article on "Crete, the Island of Discord," by D. Kalopothakes, a Greek writer educated in America, now resident in Athens, and in a paper on "The Royal Family of Greece," by Prof. Benjamin Ide Wheeler, late of the American School of Athens, who writes from personal acquaintance with King George and the Greek Princesses.

Items of Farm News.

The United States Agricultural Department is overwhelmed with requests for sugar beet seeds.

Reports from the Northern ranges indicate that there has been considerable loss of cattle during the recent storms and floods.

## THE GRASS-AT GRAY CABLES

PRESIDENT CLEVELAND'S LETTER—GRAY CABLES, BURLINGTON, MASS., Sept. 14th, 1895.

DEAR SIR:—The results obtained from the use of the chemical fertilizer you sent me on my pasture land was entirely satisfactory. Yours very truly, GROVER CLEVELAND.

No where in the world is the grass greener, richer or more beautiful than at Gray Cables, President Cleveland's estate.

Enough Inodoriferous Concentrated Plant Food for 100 plants sent by mail for 10c.

Before treating YOUR LAWN this season send for circular, which contains instructive information on the subject of lawns. Call, if possible; consultation gratis.

ANDREW H. WARD, CONSULTING AGRICULTURAL CHEMIST, 153 Milk St., Boston, Mass.

CURRENT BUSHES. Fine stock, well branched, 3 years old. \$3 per 100 for Cherry, Fay's Prolific. Fine one year old \$3 per 100.

PANSIES. Nice varieties in mix, 75c per 100 by mail; \$4 per 1000 by express.

W. C. JENNISON, Natick, Mass.



The Reliable Henry F. Miller Pianos

Have been before the public for so many years that to make mention of their superior quality is but to repeat what is already well understood. They have stood the test of years and are endorsed and recommended by the best musicians of the country.

Old pianos and organs taken in exchange and estimates cheerfully given as to their value. Pianos sold on easy payments. Write us for catalogue, prices, terms, etc.

Henry F. Miller & Sons Piano Company, 88 Boylston Street, Boston, Mass.

STRAWBERRY PLANTS and ASPARAGUS ROOTS by 100, 1000 or 10,000 lots. Send for Catalogue to GEORGE F. WHEELER, Concord, Mass.

At the Ohio station the most desirable varieties of strawberries that have been fully tested are Warfield, Haviland, Greenville, Bubach, Crescent, Lovett and Enhance.

MARRIAGES. NUTTER-ROBINSON—At Dorchester, April 15, George Everett Nutter and Emma Julia Robinson, both of Cambridge.

SARGENT-KITLEDGE—At San Francisco, April 9, Henry A. Sargent of Portland, Ore., and Edith W. Kitledge of San Francisco.

WHITE-MAHER—At Chelsea, April 18, Chas. White and Ida Maher, both of Boston.

DEATHS. CAPEN—At North Stoughton, Mass., April 21, Frederick Capen, 76 yrs, 6 mos.

COLLIN—At Nashua, N. H., April 15, Anna Collins, 38 yrs.

KING—At Hardwick, Mass., April 17, Sarah E. (née King), 48 yrs.

PITTLLOW—At Weymouth, April 17, Thos. M. Pittlow, 48 yrs, 11 mos, 7 days.

RODGERS—At Marshfield



## A SCIENTIST SAVED.

President Barnaby, of Hartsville College, Survives a Serious Illness  
Through the Aid of Dr. Williams' Pink Pills for Pale People

From the Republican, Columbus, Ind.

The Hartsville College, situated at Hartsville, Indiana, was founded years ago in the interest of the United Brethren Church, and the state was mostly a wilderness and colleges were scarce. The college is well known throughout the country, former students having gone into all parts of the world.



PROF. ALVIN P. BARNABY.

A reporter recently called at the famous seat of learning and was shown into the residence of President Prof. Alvin P. Barnaby. When last seen by the reporter, Prof. Barnaby was in the decline of health. Today he was apparently in the best of health. In response to an inquiry the professor said:

"Oh, yes, I am much better than for some time. I am now in perfect health; but my recovery was brought about in rather a peculiar way."

"I tell me about it," said the reporter.

"Well, to begin at the beginning," said the professor, "I studied law for two years, endeavoring to educate myself for the profession. After completing the common course I came here, and graduated from the theological course. I entered the ministry and accepted

the charge of a United Brethren Church at a small place in Kent County, Mich. Being of an ambitious nature, I applied myself diligently to my work and studies. In time I noticed that my health was failing. My trouble was indigestion, and this with other troubles brought on nervousness.

"My physician prescribed for me for some time, and advised me to take a change of climate. I did as he requested and was some improved. Soon after I came here as professor in physics and chemistry, and later was financial agent of this college. The change agreed with me, and for awhile my health was better, but my duties were heavy, and again I found my trouble returning. This time it was more severe, and in the winter I became completely prostrated. I tried various medicines and different physicians. Finally, I was able to return to my duties. Last spring I was elected president of the college, and I was in a deplorable way, and the trouble, which had not been entirely cured, began to affect me, and last fall I collapsed. I had different doctors, but none did me any good. Professor Bowman, who is professor of natural science, told me of his experience with Dr. Williams' Pink Pills for Pale People, and I gave them a trial because they had benefited him in a similar case, and I concluded to try them.

"To say all that I felt when I started the second year of my college course, such as I had never experienced from the treatment of any physician. I was cured by the use of the medicine. I was entirely cured. Today I am perfectly well, feel better and stronger than for years. I certainly recommend this medicine."

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## Spraying Calendar.

REVISED FOR THE PLOUGHMAN BY PROF. S. T. MAYNARD, AMHERST.

APPLE.

1st spraying.—Bordeaux mixture just before buds begin to unfold.

2d spraying.—Bordeaux mixture and Paris green, one pound to one hundred gallons, as soon as the petals have all fallen.

3d spraying.—Bordeaux mixture from ten days to two weeks from last spraying.

4th spraying.—Bordeaux mixture from two to four weeks according to the weather. If dry and cool, the longer period, but if moist and warm, the shorter time.

5th spraying.—Ammoniacal Carbonate of Copper as the fruit approaches maturity, if the weather should be warm and moist.

This treatment is for the destruction of the codling moth, tent caterpillar, canker worm, apple and plum curculio, the apple scab or fusiculium and the leaf blight or cedar apple fungus.

Under ordinary conditions four applications will be sufficient, and where the canker worms and tent caterpillars are not abundant the 3d spraying may possibly be omitted.

PEAR.

The 1st, 2d and 3d sprayings should be the same as for the apple.

4th spraying.—Bordeaux mixture in one or two weeks.

5th spraying.—Ammoniacal Carbonate of Copper when the fruit is nearly grown.

This treatment is for the codling moth, the pear scab and leaf fly blight.

For the pear tree psylla use for 1st spraying, Kerosene Emulsion as soon as the first insect is detected.

2d spraying.—Kerosene Emulsion in one or two weeks if the young insects begin to appear.

3d spraying.—Kerosene Emulsion in one or two weeks.

1st spraying.—Bordeaux mixture just before the flower buds open.

2d spraying.—Bordeaux mixture and Paris green, one pound to 250 gallons, as soon as the petals have fallen.

This is for the plum curculio, the leaf blight, and the brown fruit rot.

1st spraying.—Bordeaux mixture just before the flower buds begin to open.

2d spraying.—Bordeaux and Paris green, one pound to 100 gallons, as soon as the petals have fallen.

3d spraying.—Bordeaux mixture and Paris green, one pound to 150 gallons, in from five to seven days.

4th spraying.—Ammoniacal Carbonate of Copper, as the fruit approaches maturity.

The above treatment is for the plum curculio, the black knot, the brown rot and leaf blight.

CHERRY.

For the plum curculio, black knot, leaf blight, and brown rot, spray as for the peach.

For the black aphid use the kerosene emulsion, after the third application of the Bordeaux mixture, throwing it with as much force as is possible in, among and under the curled leaves where this insect is found sheltered.

1st spraying.—Bordeaux mixture before the buds unfold.

2d spraying.—Bordeaux mixture and Paris green, one pound to one hundred gallons, just before the blossoms open.

3d spraying.—Bordeaux mixture and Paris green as the grapes have set, i.e., in from five days to two weeks.

4th spraying.—Bordeaux mixture in from two to four weeks, according to weather.

5th spraying.—Ammoniacal Carbonate of Copper, when the fruit is near the first stages of coloring.

This is for the rose-bug, mildew and black rot.

RASPBERRY AND BLACKBERRY.

1st spraying.—Bordeaux mixture just before growth begins.

2d spraying.—Bordeaux mixture as the first blossoms open.

3d spraying.—Bordeaux mixture as soon as the fruit is gathered.

4th spraying.—Bordeaux mixture should the fall orange rust appear in from two to four weeks.

This treatment is for the spring orange rust, fall orange rust, anthracnose and leaf blight.

"In the first application before the leaves unfold it is believed that the Bordeaux mixture will give better results than the simple solution of copper sulphate recommended in Bulletin No. 25.

GRAIN.

The movement in flour continues slow, while the break in wheat causes an easier tone to prices.

Spring patents, \$4.45 to \$4.80. Winter patents, \$4.25 to \$4.50. Winter patents, \$4.25 to \$4.50.

On Meal.—Continues quiet and unchanged at \$3.05 to \$3.10 for ground and rolled, and \$3.45 to \$3.50 for cut.

Corn Meal.—The market is quiet at \$5.65 to \$5.75 for 100 lb. bbl. of meal, and \$1.45 to \$1.50 for 50 lb. bbl. of meal.

On Flour.—Trade continues quiet, with prices steady at \$2.50 to \$2.60 for 100 lb. bbl. of flour.

Corn.—Trade is quiet with prices quoted higher on spot and steady to ship.

Steamer yellow, spot, 35c. No. 2 yellow, spot, 34c. No. 3 yellow, spot, 33c. Country yellow, spot, 34c. No. 2 yellow, spot, 33c. No. 3 yellow, spot, 32c. Country yellow, spot, 33c.

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Steamer yellow, spot, 35c. No. 2 yellow, spot, 34c. No. 3 yellow, spot, 33c. Country yellow, spot, 34c. No. 2 yellow, spot, 33c. No. 3 yellow, spot, 32c. Country yellow, spot, 33c.

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OWN H. JACKSON, Successor to JACKSON BROS. NEW YORK STATE DRAIN TILE AND PIPE WORKS. Established 1862. 80 TRINITY AVE., BOSTON, N.Y. Manufacturer of and Dealer in Agricultural Drain Tile, Salt-Glazed Sewer Pipe, Red Pressed Brick, Mortar Colored Fire Brick, Oven Tile, Chimney Tiles, etc. Also, new Trench Fire Clay Store pipe, Fire Clay, Kaolin, Etc.



Horse Carts. ALL QUOTATIONS ARE WHOLESALE.

The price of creamery and dairy butter remains about as quoted last week. Both supply and demand are good, but the increase of the spring milk will probably soon bring about a decline in quotations. Grass fed butter from the southwest may be expected to be in the market in small quantities.

The exports are increasing. Second grades of butter can be had at low prices and much of this quality is sent abroad.

Prices for best still held at 18 to 18 1/2 cents. Western 17 to 18 cents. Good dairy 14 to 16 cents.

Cable advices of April 28 to George A. Cochran from the principal markets of Great Britain give butter markets lower and declining in consequence of increased supply of butter from the Continent. Little or nothing in American creamery offering. Some state lots of creamery selling at 13 to 14 cents.

Common grades of butter are in fair demand at 10 to 12 cents. Cheese markets are again the turn easier with the week's work offering first rates at 11 to 12 cents. The tendency of the market is downward.

The make of cheese is likely to increase. The business has paid during the past week. The filled cheese law has helped sales of the real article.

In usual seed planting time, potatoes are in extra demand and slightly better prices hold at \$1.40 to \$1.50 per bushel.

Extra weather, hold firm at prices quoted. Native cabbage \$1.50 per bushel. Squashes \$2. Spinnage \$2. The earliest nearly ripe cabbages near from the Budlong market garden, near Providence, R.I.

Little native asparagus is on the market at \$3.75 per dozen bunches. This is about the same as quotations for best southern grass, but the southern article is put up in double-sized bunches. Bunches of 30 spears a box. Fresh asparagus holds at 4 to 5 cents for native article. Western in 30 lb. packages sells at \$1.25. Mushrooms are plenty.

Apples of first quality are less plenty as the season grows warmer. Really good Baldwin's bring \$1.50 and the common ones range from \$1.25 to \$1.75. Choice Russets bring \$2, rather poor ones \$1.25, and the range is between these figures.

Native cranberries are mostly gone. Southern fruit and truck are plenty.

POULTRY AND EGG SPECIAL.

Reported for the PLOUGHMAN BY W. H. RUND.

ALL QUOTATIONS ARE WHOLESALE.

The small lots of fresh killed poultry arriving are meeting with a fair sale at prices favorable to the shipper. Broilers are in steady demand with prices ranging from 35 to 40 cents dressed, 27 to 30 cents alive. Weights can be used ranging from 1-1/2 to 2 lbs. each dressed, and one size bringing fully as much as the other at present.

No broilers need be drawn or headed. Shippers should be careful that the animal heat is thoroughly out before packing. Many lots of crooked broilers, bumpy and fat, are being offered, giving which will not bring high prices. There is some inquiry for large soft roasting chickens, and some receipts have sold as high as 30 cents. This extreme and only one first class stock will command it, prices ranging downward from this figure to 12 and 14 cents. Large fancy native capons are quite scarce at 16 to 18 cents, small size and slips at a less price. A few lots of green ducks have begun to arrive, and the market is not very strong at 28 to 30 cents. Demand for turkeys is not very strong, but prices are steady at 12 to 14 cents for native pigeons, 15 to 20 cents for squabs.

There is little change to note in our egg market. Receipts of all grades continue liberal, and best marks of Western stocks are ranging 10 to 14 cents, and it takes something above the average of these prices to draw attention. These quotations. Fancy marks of nearly all brown stock range 13 to 14 cents.

LUMBER MARKET.

Spice ranges 10-15 and under, by car. 13 50 to 14 50. Spruce, yard and order by car. 13 50 to 14 50. Spruce, yard, cut to lengths. 13 50 to 14 50. Spruce, 12 in. frames. 13 50 to 14 50. Spruce, matched 6's, 7 and 9 cips. 14 50 to 15 50. Spruce, 8 in. and up, stock width. 14 50 to 15 50. Spruce, No. 1. 10 c. and up, stock width. 14 50 to 15 50. Hemlock, 8 in. and up, stock width. 14 50 to 15 50. Hemlock, 10 in. and up, stock width. 14 50 to 15 50. Hemlock, 12 in. and up, stock width. 14 50 to 15 50. Hemlock, 14 in. and up, stock width. 14 50 to 15 50. Hemlock, 16 in. and up, stock width. 14 50 to 15 50. Hemlock, 18 in. and up, stock width. 14 50 to 15 50. Hemlock, 20 in. and up, stock width. 14 50 to 15 50. Hemlock, 22 in. and up, stock width. 14 50 to 15 50. Hemlock, 24 in. and up, stock width. 14 50 to 15 50. Hemlock, 26 in. and up, stock width. 14 50 to 15 50. Hemlock, 28 in. and up, stock width. 14 50 to 15 50. Hemlock, 30 in. and up, stock width. 14 50 to 15 50. Hemlock, 32 in. and up, stock width. 14 50 to 15 50. Hemlock, 34 in. and up, stock width. 14 50 to 15 50. Hemlock, 36 in. and up, stock width. 14 50 to 15 50. Hemlock, 38 in. and up, stock width. 14 50 to 15 50. Hemlock, 40 in. and up, stock width. 14 50 to 15 50. Hemlock, 42 in. and up, stock width. 14 50 to 15 50. Hemlock, 44 in. and up, stock width. 14 50 to 15 50. Hemlock, 46 in. and up, stock width. 14 50 to 15 50. Hemlock, 48 in. and up, stock width. 14 50 to 15 50. Hemlock, 50 in. and up, stock width. 14 50 to 15 50. Hemlock, 52 in. and up, stock width. 14 50 to 15 50. Hemlock, 54 in. and up, stock width. 14 50 to 15 50. Hemlock, 56 in. and up, stock width. 14 50 to 15 50. Hemlock, 58 in. and up, stock width. 14 50 to 15 50. Hemlock, 60 in. and up, stock width. 14 50 to 15 50. Hemlock, 62 in. and up, stock width. 14 50 to 15 50. Hemlock, 64 in. and up, stock width. 14 50 to 15 50. Hemlock, 66 in. and up, stock width. 14 50 to 15 50. Hemlock, 68 in. and up, stock width. 14 50 to 15 50. Hemlock, 70 in. and up, stock width. 14 50 to 15 50. Hemlock, 72 in. and up, stock width. 14 50 to 15 50. Hemlock, 74 in. and up, stock width. 14 50 to 15 50. Hemlock, 76 in. and up, stock width. 14 50 to 15 50. Hemlock, 78 in. and up, stock width. 14 50 to 15 50. Hemlock, 80 in. and up, stock width. 14 50 to 15 50. Hemlock, 82 in. and up, stock width. 14 50 to 15 50. Hemlock, 84 in. and up, stock width. 14 50 to 15 50. Hemlock, 86 in. and up, stock width. 14 50 to 15 50. Hemlock, 88 in. and up, stock width.







## OUR HOMES.

## THE SINGING IN GOD'S-ACRE.

Out yonder in the moonlight, wherein God's Acre lies,  
Go angels walking to and fro, singing their  
lullabies:  
Their radiant wings are folded and their eyes  
are bended low,  
As they sing among the beds whereon the  
flowers delight to grow:

"Sleep, oh, sleep!  
The Shepherd guardeth His sheep!  
Past speedeth the night away;  
Soon cometh the glorious day;  
Sleep, weary ones, while ye may—  
Sleep, oh, sleep!"

The flowers within God's-acre see that fair and  
wondrous sight,  
And hear the angels singing to the sleepers  
through the night;  
And, lo! throughout the hours of day those  
gentle flowers prolong  
The music of the angels in that tender slumber-  
song:

"Sleep, oh, sleep!  
The Shepherd guardeth His sheep!  
He that guardeth His flock the best  
Hath foldeth them to His loving breast—  
So, sleep ye now and take your rest—  
Sleep, oh, sleep!"

From angel and from flower the years have  
learned that sweet song,  
And with its heavenly music speed the days  
and nights along;  
So, through all time, those flight the Shepherd's  
vigil glorify  
God's-acre slumbereth in the grace of that  
sweet lullaby:

"Sleep, oh, sleep!  
The Shepherd guardeth His sheep!  
Past speedeth the night away;  
Soon cometh the glorious day;  
Sleep, weary ones, while ye may—  
Sleep, oh, sleep!"

—Eugene Field.

## ALVIRA SIMPKINS' LOVE-STORY.

BY DOROTHY E. NELSON.

It was two o'clock on a hot summer afternoon. Little languid breezes touched the tops of the grasses that fringed the roadside, or moved a few leaves here and there on the maples, but that was all. The sun, beaming down on the white picket fence, seemed to draw dazzling lines out into the air. The flowers in the narrow garden-bed on each side of the path were dull and drooping. The shrill, careless whirring of the cicada seemed like the voice of the heat.

A woman walked down the path; she was large and stout and her skirts brushed the drooping flowers all the way. She pushed open the door, and stood on the threshold a moment till her eyes could be accustomed to the change from the quivering brightness outside.

"For the land's sake, Alvire!" she exclaimed, "I should think you might as well be sewing in a cellar—all that black stuff, too!"

Two women were at the windows, sewing. A table covered with a mass of black alpaca stood in the space between the windows, both the women had pieces of the work in their hands. Miss Alvira was pulling out basting and rolling them into a little wad of thread which she put in her mouth. Her pronunciation was somewhat less distinct than usual, but her dignity was unimpaired by such trifles.

"I guess my eyes is good for some time to come, Miss Corbin," she answered stiffly. "Set down, an' I'll have this ready to try on. There's a fan on the stand."

Mrs. Corbin found the fan and plied it vigorously, her rosy face seeming to come and go in flashes behind the big palm-leaf.

"Lor, Alvire, you needn't be so touchy," she said good-naturedly. "It's powerful warm today, and I ain't in any such a hurry. Lay it by till it's cooler. Jessie there is lookin' as white as a ghost."

The girl at the window cast a half-frightened glance at Miss Alvira.

"Oh, I'm all right," she said slowly. "I guess she is," snapped Miss Alvira, pulling out the bastings with a jerk. "She ain't worked hard enough to hurt a fly today. Young folks didn't used to think themselves so dreadfully delicate."

"She's now," said Mrs. Corbin, comfortably, "you ain't no need to get in such a stew, Alvire. I said 'twas too hot for both of you, but land, you never was one to give up."

Miss Alvira worked faster than ever. Her small, nervous hands, her thin, spare figure, her sandy hair and firmly-shut lips, even the very folds of her scanty dress seemed to show exhaustless energy. She cast one quick glance over at the other window, but Jessie did not see her. The girl was sewing slowly, as if merely drawing the thread through the cloth was an effort. Her face, with its exquisite, flower-like curves, was very white; little moist dark rings of hair were clinging to her forehead, and there were heavy circles under the big gray eyes. Her whole figure, with its patient, pathetic droop, made one think of the drooping flowers outside.

Miss Alvira rose and shook the threads off her dress.

"Now, Miss Corbin," she said briefly. Mrs. Corbin rose stiffly and put on the black skirt. Miss Alvira eyed it critically.

"Turn round slowly," she said. "There, no, a little further to the right! I thought so. You are getting to lean to the right, Miss Corbin."

But Mrs. Corbin's good humor was untouched.

"Mercy aikes, Alvire!" she said, with a long, cherry laugh, "when a body gets as old as I be, she's bound to lean somewhere. Might as well be to the right as anywhere else."

Miss Alvira had her mouth full of pins and was kneeling on the floor, pinning up the hem.

"There," she said, presently, "I guess that will do. I'll have it done Thursday, Miss Corbin."

"Now, don't hurry," begged Mrs. Corbin. "I'd a sight rather wait than have you and Jessie work yourselves to death over it this weather. I ain't in a mite of a hurry."

"When I say a thing will be done, I calculate to have it done," replied Miss Alvira, severely. "Weather don't make no difference. I hope you won't get het up going home, Miss Corbin. Take the fan along if you're a mind to."

Mrs. Corbin's perceptions were not of the finest, but she vaguely felt that she was dismissed.

"I dunno's I'm so warm as all that," she said, with an attempt at dignity.

"Be sure you don't get that dress binding against the shoulders, Alvire. The last one was. I always felt as if 'twas hitching up somewhere. Goodby, Jessie," and she closed the door with mild emphasis.

Miss Alvira had scarcely noticed her. She waited until she was out of hearing, and then went over to Jessie and took the work out of her hands.

"Why didn't you tell me you wa'n't feeling well?" she said. "You're as white as a sheet. I'll do this, and you go lie down. Better stay to supper, and then you can go home in the cool of the evening."

The girl lifted her big gray eyes and smiled faintly.

"I ain't so tired," she said, "and I must go home at five o'clock."

"Must? There ain't no 'must' about it. You've got to stay."

"I can't, Miss Alvire. It's real kind of you, but I can't," the girl repeated with a kind of helpless obstinacy.

"I'd like to know why not."

A faint rose-color crept into the pale cheeks, and the long lashes drooped over the gray eyes.

"I promised George I'd be ready at five, and he was going to stop for me," she said slowly.

Miss Alvira stood and looked at her a moment in silence and a fierce pain seemed to beat through her breast. The girl was so beautiful! She had always envied her beauty, and now she had a lover—young and beautiful and had a lover. To the little, thin, plain dressmaker with only a bare, lonely girlhood behind her and only years of bare, lonely life before her, this girl seemed the embodiment of all that should have been hers and never was. She felt for one moment as if she almost hated her.

A strange, frightened look came into her eyes as she recognized the feeling. She forced herself to speak quickly.

"You go lie down," she said, "I'll wake you in time."

The girl looked up in faint surprise.

"If you really can spare me," she said in a bewildered way.

"Spare you?" said Miss Alvira, scornfully. "I could do in an hour all you've done today. You do as I tell you."

The girl obeyed without a word. She lay down on the old hair-cloth sofa on the other side of the room. Miss Alvira brought a pillow from the bedroom, and awkwardly tried to fix it under her head; then she sat down by the window and began sewing. She sat very stiff and straight, and her stitches were firm and even. Jessie, lying passively on the sofa and watching the exquisite curves of lashes and cheeks and chin, and the delicate beauty of her coloring, and did not feel the lack of expression. Miss Alvira stood for a long time studying it all. Then she turned away with a sort of groan.

"Lord, Lord, why should it make such a difference that her eyes are big and mine small? Don't mine see just as good? And because she's young and pretty, and don't know how to lift a finger to help herself, she'll be took care of always. And here's me—I always had to take care of other people, and now they are gone and I ain't never had nothing and never will. Why does some folks get it all?"

She went back to her place by the window, but she did not take up her sewing. Then the sun had slipped further to the west, and a cool, gray shadow was creeping over the tiny yard. The fence was no longer dazzling white. A tiny breeze had sprung up and was lifting the head of a flower here and there. Miss Alvira folded her hands and sat up straighter than ever. She was going to fight this thing out.

"It's George Harkins she mean," she said. "He's a likely young fellow; he'll be real good to her, I guess, and she'll be happy every day. And here's me, Alvire Simkins, jest living here in this little box of a place, making the covering for other folks' lives and havin' no life of my own. It's all so sarrer and scrimpy; I allus did hate working in a pint pot. My very name sounds like snippings—nothing new and fresh. Suddenly she sat up straighter and spoke louder, as if to some invisible opponent.

Look here, Alvire Simkins—why are you going to do about it? Do you suppose moping around and wishing you were young again and had other people's big eyes and black hair is going to make things any better? And what would you do with a man tagging round all the time, I'd like to know? 'Twould fret you to death, and you know it. Ain't you a heap better off earning your own living in your own way, and not being beholden to nobody? You know you are."

Her voice changed from its fierce contempt, and there was a pleading tone in it no one had ever heard; she would not have recognized it herself. "But it's the loneliness of it," she said, "nights and rainy days, and times when the wind is howling across the sward, and not a soul comes in, and there's nothing but the clock ticking till it seems as if I should go wild. And I can't stay neither. I tried it once, and 'twas so still it scared me. I never could bear to have a cat under foot, even if it would be company. I wanted suthin' human and understanding. It doesn't seem's if that was so wicked!"

The wishfulness in her tone crept into her figure; there was something humble and pleading in her whole attitude. It was only for a second, however; then she straightened up and spoke in her old, quick, scornful manner.

"Well, I didn't think you was sech a poor, meddling thing as that, Alvire Simkins! Ain't people ever lived alone before you, I want to know? And besides," changing to a grave seriousness, "I's pose, someways, there isn't love enough to go round. Can't you stand it better than a pretty, useless little thing like that?"

A faint, sweet summer breeze stirred the curtain behind her and brought in the scent of the white day lily in the yard. It brought a strange fancy to the

lonely little dressmaker. A dull red crept into her face.

"I dunno's it's any harm," she said stoutly. "I never had no beau of my own, and it's years enough since I was as young as Jessie. It won't hurt her any to pretend I was a girl again, and I was her. She'll never know, and maybe I can fix things a little."

She never thought of sewing now. Her hands lay idle in her lap, and there was a curious, touched look on her face, as if she had opened a book closed for many a year and found there a few faded violets from a spring day of long ago. The shadow crept and crept until it filled the little yard and even stretched out beyond the fence. The hands of the clock on the mantel made their strange, invisible circuit round its face. Still Jessie slept on, and still the quiet little figure with the new look on its plain face sat by the window brooding.

She was aroused by the appearance of a man coming slowly down the road and looking frequently toward the gate. "Land sakes! if I haven't set here all the afternoon, and here's George Harkins this minute!" she cried.

She was hurried and nervous, and there were two red spots on her cheeks. One might have thought it was her lover she was going to meet as she stepped softly across the room and closed the door behind her. The man was just slowly passing the gate and stopped when she called him. He was a handsome young fellow with an air of alert strength about him, but there was something selfish in the lines of his chiselled lips.

"Was you waiting for Jessie?" asked Miss Alvira.

She always went directly to the point. She was not going to back out now. He flushed up to the roots of his curly brown hair.

"I was going by and thought I'd stop," said he, confusedly.

"Nonsense! you were expecting to meet her—she said so," answered Miss Simpkins, curtly. "Well, she was done up by the heat. I made her lie down, and I wouldn't wake her. She's going to stay to supper with me. Couldn't you come for her later?"

The first part had been easy enough, but as she made the simple request she hesitated curiously; with the strangeness of the afternoon behind her, she felt as if she was making it for herself. The young man looked at her in surprise.

"Why, yes, I guess I can," he said. "What time shall I come?"

"At about seven," answered Miss Alvira, with promptness. "I'll be waiting for you."

He waited awkwardly a moment, but neither seemed to have anything to say, so he turned away. In a minute he came back. Miss Alvira was already half way down the path, but she turned as he called her name.

"There ain't anything the matter with Jessie, is there?" he said, anxiously. "I mean—she's only tired?"

"Of course there ain't nothing the matter," Miss Alvira answered scornfully. "She'll be ready at seven."

There was a smile on her face as she stepped back into the darkened room again.

"That's all right," she said, with a quick nod of satisfaction. "He seems real fond of Jessie. Now, what next? If it was me," with a touch of the old shamefacedness, "I guess I'd like a nice supper to kind of celebrate."

He waited awkwardly a moment, but neither seemed to have anything to say, so he turned away. In a minute he came back. Miss Alvira was already half way down the path, but she turned as he called her name.

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There was a smile on her face as she stepped back into the darkened room again.

"You've been real good to me, Miss Alvira," she said awkwardly. "I wanted to tell you."

Miss Alvira's voice came sharply out of the gloom.

"Aint you gone yet, Jessie? George will be tired waiting. Do run along."

Jessie turned quietly away. Miss Alvira, stealing to the window, watched the two figures till they vanished in the soft summer twilight. Then she went back into the little sitting-room, and lit the lamp and sewed on the black alpaca until ten o'clock.

The summer days passed as if in a dream after that. There was an unreality about them that confused and abashed Miss Alvira, who had been used to dealing with plain facts, and facts alone, but she had never in her life been so happy as she was in that summer romance. Her very face changed under its touch. The neighbors could not understand what they all spoke of it, and said how well Alvire was looking.

After that night Jessie told her everything. The girl was scarcely more than a child, and had to tell some one, and she could have had no better or safer confidant.

It was a strange friendship, truly, but night after night Miss Alvira would watch the two walk away together, and then would sit through the dusk and far into the dark, thinking over all Jessie had told her during the day, and living the love-life she had never had, in the life of this girl.

She thought and worried about it far more than Jessie. If George was late she was the anxious one; if any quarrel had happened between the lovers she would have suffered twice as intensely as Jessie. But nothing did happen, and the summer deepened and deepened, and one day Jessie said she was to be married in September.

Then a tidal wave of excitement swept over Miss Alvira. The wedding must be nice, and there was so much to do. Nobody but she should put a stitch in the wedding dress. She lay awake a whole night planning it out. She knew well that Jessie would make no objections. The girl was an orphan with only one little sister; there was no one to care for her, and she was too impatient to plan for her future.

"There's the money I was laying by for a black silk," thought Miss Alvira; "that will just do. But land sakes, I shall want the silk to go to the wedding in! Well—" after sharp thought, "I can't pay for both, and I rather guess the wedding dress is more important. I can fix over my old silk again, and Jessie's shall be the prettiest I can get."

She told the girl the next morning, and Jessie received the gift in her usual quiet way. It never occurred to her to wonder where Miss Alvira got the money; she was only pluckily happy that she could have a pretty dress, and roused into rather unusual animation when the work on it was fairly begun.

One day Jessie brought her little sister—a grave little thing, with big, serious black eyes. She took a strong fancy to Miss Alvira, and it grew to be the habit for her to come every day with Jessie and sit quietly on a little stool between the two, fashioning tiny doll dresses from the pieces Miss Alvira gave her, while they worked on Jessie's wedding clothes.

And so the summer slipped away and September came, and in two weeks Jessie was to be married. One morning Miss Alvira heard her knock at the door earlier than usual. She hurried to open it. She was anxious to tell Jessie about the trimming for the bottom of her skirt; she had decided in the night that quilting would be the best; she had a scrap of the wedding dress in her hand as she opened the door.

Jessie was leaning against the house, looking down the garden path. The childish lips were quivering, and the pretty gray eyes red and swollen. She had evidently been crying all the way over.

Miss Alvira's face grew white.

"Jessie, what is the matter?" she cried quite sharply.

The girl dropped wearily into the nearest chair.

"It's all over," she said, mechanically. "Jessie Parker, what do you mean? Come in and tell me about it."

The tone was tense with anxiety, but it did not stir the girl.

"It's all over," she repeated in the same dull fashion.

Miss Alvira was almost beside herself.

"Jessie, look at me!" she commanded sternly.

The girl lifted her eyes obediently.

"Now tell me what is the matter," Jessie began to cry hopelessly.

"George says he isn't going to be bothered with Dolly, and I can't leave her alone, and there isn't any one else to take her."

Miss Alvira was almost petrified with horror.

"What do you leave your own sister?" she cried.

"Oh, she isn't my own sister!" said Jessie, wearily. "She's only my step-sister. I'd leave her if I could, but I can't."

A sudden thought came to Miss Alvira. Was it—could it be possible that there was love in the world that nobody wanted? Love that she could take and have for her own with no other claim upon her? She was fairly trembling, and had to cling to a chair before she could speak.

"Jessie!" she said.

The girl looked up. There was something in the tone that stirred her, even in her selfish misery.

"Jessie, are you sure you would be willing to give her up?"

The girl looked at her in surprise.

"Why, I'd give her to anybody if I could," she answered. The possibility of caring for the child's love never entered her mind.

Miss Alvira's cheeks were flushing and then paling, and she spoke with a strange effort.

"Jessie, will you give her to me?"

Even Jessie was roused then to a faint protest.

"Why, Miss Alvire, you don't want her—she'll be such a care!"

But there was an undertone of hope in the girl's voice and Miss Alvira drew a long breath and sat down in one of the hard, cane-seat chairs as if she was

very tired. She picked up a piece of Jessie's wedding dress.

"I thought we'd make this the rose quilting, after all," she said.

Jessie's wedding day was clear and bright. Miss Alvira went over very early in the morning for her and Dolly. All Dolly's clothes had been brought over the day before, and it had given the little dressmaker exquisite pleasure to see how few and poor they were. She dressed the child herself and then dressed Jessie, and the three went over to the little village church together.

Miss Alvira had looked forward to that day for months, and yet when it came—Jessie and George, the old minister, and the familiar faces of the neighbors—all seemed like a dream. The reality was the little warm clinging hand clasped in hers.

In the cool of the afternoon they came back and had tea at Miss Alvira's. Jessie, usually so indifferent, had insisted on that. Then at dusk she kissed the little sister good-by, and she and George walked away together, as they had done before so many, many times, but they all felt the difference, and knew that now she could never turn back again.

Miss Alvira and Dolly stood at the gate watching them, and then walked hand in hand down the path and back into the little room. The child was tired by the excitement of the day; she climbed up into Miss Alvira's lap, and sat looking out into the twilight with her grave, dark eyes. Once she nestled sleepily and said something to herself. Miss Alvira bent down to catch the words.

"Dolly loves Miss 'Virey," she whispered drowsily, and then the long lashes drooped on the round cheeks and she was fast asleep.

Miss Alvira sat there stiff and straight. Her arms and back ached, but she never moved. The new moon was shining overhead; there were sweet, soft whispings in the trees, and little plays of light and shadow across the grass and in the tiny garden. The sweetness and graciousness seemed to sweep through her lonely heart and fill it till to overflowing. And then Miss Alvira knew her love-life had begun.—Waverley Magazine.

**A SPRINGTIME PURITAN.**  
The silent snow has ceased to fall,  
The noisy rain comes down and down,  
And turns, between two milder suns,  
A white world into brown.

Here are the lilies and the moss,  
The rocks on which they grow,  
Here are the daisies and the buds  
Of flowers we used to know.

Behold, in pink she cometh forth,  
As Cycles unlock,  
Our Puritan, the arbutus,  
Beside her pilgrim rook.

—Boston Transcript

Sometimes a bargain only succeeds in damaging the lock of a safe so that the combination won't work.

Next morning the bank officers can't get at their own money. There may be millions in the safe, but if the combination won't work, getting at it in a hurry they would be bankrupt.

A sick man is in very much the same fix about getting at the nourishment he needs to keep him alive. There is plenty of good food at hand, but his digestive organs are out of order; the nutritive "combination" of his system won't work.

It gives the digestive and blood-making organs power to make pure, rich, healthy blood, and pour it into the circulation abundantly and rapidly. It drives out all bilious poisons and scrofulous germs, cures indigestion, liver complaint, nervousness and neuralgia, and builds up solid flesh, nerve power and nerve force.

Mrs. Rebecca Gardner, of Grafton, Vt., writes: "I was so sick with dyspepsia that I could not eat anything for over four months. I had to starve myself, as nothing would stay on my stomach. I was so badly off I could not eat even a cracker. I thought I was going to die. I weighed only 50 pounds, and was almost blind. I took nothing but food and medicine, but it did me no good. I took two bottles of the 'Golden Medical Discovery,' and am now as well as I ever was, and weigh 130 pounds."

The girl dropped wearily into the nearest chair.

"It's all over," she said, mechanically.

"Jessie Parker, what do you mean? Come in and tell me about it."

The tone was tense with anxiety, but it did not stir the girl.



## How weak

the soap and water seems when you begin your washing! You don't get any strength out of it till the work is about done. Plenty of hard work and rubbing and wear and tear, even then—but more of it at the beginning; when the water is weakest.

Now with Pearline, the water is just as strong at the beginning as at the end. This is one of the reasons (only one) why Pearline acts so much better than soap in all washing and cleaning. Use no soap with it.

**Millions NOW USE Pearline**

We Recommended and Sold to Our Clients the Following Stocks:  
About 250,000 Shares of Isabella at between 11 and 25c, now 45c.

**ALSO A LARGE AMOUNT OF THE FOLLOWING STOCKS:**  
Anacosta at between 10c and 25c, now 45c; Bankers at between 1 1/2c and 3c, now 13c; Portland " " 27 1/2c, 40c, " 1 1/2c, 3c, 4c, 5c, 6c, 7c, 8c, 9c, 10c, 11c, 12c, 13c, 14c, 15c, 16c, 17c, 18c, 19c, 20c, 21c, 22c, 23c, 24c, 25c, 26c, 27c, 28c, 29c, 30c, 31c, 32c, 33c, 34c, 35c, 36c, 37c, 38c, 39c, 40c, 41c, 42c, 43c, 44c, 45c, 46c, 47c, 48c, 49c, 50c, 51c, 52c, 53c, 54c, 55c, 56c, 57c, 58c, 59c, 60c, 61c, 62c, 63c, 64c, 65c, 66c, 67c, 68c, 69c, 70c, 71c, 72c, 73c, 74c, 75c, 76c, 77c, 78c, 79c, 80c, 81c, 82c, 83c, 84c, 85c, 86c, 87c, 88c, 89c, 90c, 91c, 92c, 93c, 94c, 95c, 96c, 97c, 98c, 99c, 100c, 101c, 102c, 103c, 104c, 105c, 106c, 107c, 108c, 109c, 110c, 111c, 112c, 113c, 114c, 115c, 116c, 117c, 118c, 119c, 120c, 121c, 122c, 123c, 124c, 125c, 126c, 127c, 128c, 129





## THE HORSE.

—The Boston horse show last week was a success financially as well as otherwise.

—Geneva 2.11 1-2 died on shipboard en route to Europe.

—Grace Hastings 2.12 brought \$2500 at a recent sale.

—Phoebe Wilkes 2.08 1-2 will be bred to Baron Wilkes 2.18.

—Ethelwyn, dam of Impetuous 2.13, has a bay filly by Directum 2.05 1-2.

—Coming phenomenal trotters and pacers seem to be as plentiful as ever.

—It has been voted to add to the horse department of the Fair at Worcester a general purpose class, and to offer premiums of \$50 and \$25. The animals shown in the class must be owned and driven by men actively engaged in farming. Horses will be shown first in wagons or carriages, and will then be hitched to drags, loaded with not more than 500 pounds.

## HINTS ON TRAINING.

The first step in teaching horses, as outlined in the horse department of the Rural World, is to adopt some word at the sound of which they are to understand that they must stop. Words that are easy to speak and which can be made emphatic, should be chosen, such as "ho," "whoa," etc., and every time the word is used the horse to which it is spoken should be made to obey it fully. Carelessness in regard to this matter will do more to undo what has been taught than anything else. When a horse fully understands the meaning of the word which you use when you wish him to stop and stand still, the greater part of the work is accomplished. He then could be trusted with safety while you leave him a short time. To take no risk, and make the work more effective, it is a good plan to get into the vehicle to which a horse is hitched, and, having stopped after a short drive, one should get out and leave him for a short distance. Should the horse then start, the one in the vehicle can draw the lines suddenly and thus prevent his getting away. There will be no trouble in teaching any horse with an ordinary amount of good, common sense to stand as long as you desire without being hitched, if a little judgment and patience are used in attempting it.

A *vide man* is on the lookout for a good thing. German Peat Moss, sold by C. B. Bar, ret. 45 North Market Street, for horse bedding, is one of the good things of this world.

## A Wonderful Cure for Kidney Disease and Rheumatism. A Free Gift.

The Kava-Kava shrub, as previously stated, is proving itself a wonderful curative for diseases of the kidneys or other maladies caused by Uric acid in the blood. This new botanical discovery bids fair to change medical practice in these diseases, and its compound, Alkaviv, is now regarded as a sure specific cure for these maladies. We have many letters on the subject from business men, doctors and ministers, of which the following from Rev. John H. Watson of Sunset, Texas, a minister of the gospel of thirty years' standing, is an example. He writes:

"I was suddenly stricken down on the 22d of June with an acute attack of kidney trouble (uric acid gravel). For two months I lay hovering on the border line of life, and with the constant care of two excellent physicians I only received temporary relief. My family physician told me plainly the best I could hope for was a temporary respite. I might rally only to collapse suddenly or might linger some time. But the issue was made up, and as I had for years warned others to be ready, so now more than ever I must needs put my house in order and expect the end. Meanwhile I had heard of Alkaviv and wrote to an army comrade, now principal of a college, who had tried it. He wrote me by all means to try it, as it had made a new man of him. At the end of two months, and then only able to sit up a little, I dismissed my physicians and began the use of Alkaviv. In two weeks I could ride in the carriage for a short time. The improvement has been constant and steady. I am now able to look after my business. I feel I owe what life and strength I have to Alkaviv. . . . I am fifty-five years old, have been a minister over thirty years, have thousands of acquaintances, and to every one of them who may be afflicted with any kind of kidney trouble I would say, Try Alkaviv."

Mrs. James Young, of Kent, Ohio, writes that she had tried six doctors in vain, that she was about to give up in despair, when she found Alkaviv and was promptly cured of kidney disease and other ailments peculiar to women. Many other ladies give similar testimonials.

So far the Church Kidney Cure Company, No. 420 Fourth Avenue, New York, are to only importers, and they are so anxious to prove its value that for the sake of introduction they will send a free treatment of Alkaviv prepaid by mail to every reader of the PLOUGHMAN who is a sufferer from any form of Kidney or Bladder disorder, Bright's Disease, Rheumatism, Dropsy, Gravel, Pain in Back, Female Complaints, or other affliction due to improper action of the kidneys or urinary organs. We advise all sufferers to send their names and address to the company, and receive the Alkaviv free. To prove its wonderful curative powers, it is sent to you entirely free.

See our SPECIAL OFFER on the sixth page.

## Peach Culture.

A REVIEW OF THE EFFORTS TO SECURE LEGISLATION FOR THE CONTROL OF "PEACH YELLOW" IN MASSACHUSETTS.

BY PROF. S. T. MAYNARD.

Much ill feeling has resulted from the discussion of the law proposed for the suppression of the disease or condition known as peach yellows, and it seems fitting that a review of the situation should be made by the writer, who has been severely criticised by the advocates of the measure for the position he has taken, and as warmly commended by its opponents.

This is done with the hope that it may bring about a more full understanding of the situation and mutual good feeling among the fruit growers of the state, who must work together if they wish to secure success in any undertaking.

PROFESSOR MAYNARD'S EXPERIENCE.

It is now 35 years since the writer grew his first peach tree from seed, and every year since has grown more or less seedlings—using often from one to ten bushels of seeds—and during that time having more or less fruiting trees under his charge. He has planted two orchards of over 1000 trees each, and has tested every variety of value for New England that has been introduced since the advent of Crawford's seedlings and Oldmixon. Much work has also been done each year with fertilizers, insecticides and fungicides, together with investigation of the disease both in the field and laboratory, and this review is offered as the honest conviction resulting from the above experience, and with the hope that it may call out equally honest views and experience from others. In this discussion we must bear in mind that what we call the truth today, or the highest light of science, is often tomorrow discredited by new light, and we should be very careful that whatever stand we take be based on the broad foundation of an earnest, honest purpose and a desire for the greatest light possible.

BOTH SIDES PARTLY RIGHT.

The writer believes that both the advocates and opponents of the measure were in part right in the positions taken. The former were right and honest in their desire to improve the condition of the peach growing industry, but were wrong in their belief that no other remedy than the one proposed exists for eradicating the disease, and in condemning the opponents of the measure as ignoramus, too "pig-headed" to see what is for their best good.

The opponents were right in their stand against the measure, believing as they do that the disease is not contagious, that it can be eradicated without such laws, that education and not law, except in extreme cases, is the true method of reform, and that under the present depressed condition of all industries it is not advisable to establish more commissions. They were wrong in condemning the advocates of the bill as men who were seeking fat salaries offices.

THERE IS A DISEASE.

It is acknowledged by all horticulturists that a serious disease or condition called the yellows exists and is a great injury to the profitable growth of the peach in all the New England States, but there is a wide difference of opinion among them in all parts of the country as to the nature of this disease or condition and the means necessary to overcome it.

IS IT CONTAGIOUS?

It is claimed by many scientists and orchardists of large experience that the disease is contagious; that the only remedy is the destruction of the trees as soon as the first symptoms appear, and that the great improvement of the orchards in the states where restrictive laws have been enacted has been wholly due to the enforcement of such laws.

Other scientists and orchardists of large experience claim that the disease has not been proven to be contagious, that the only proof offered of its contagious nature, that by bud inoculation, is not conclusive (i. e., by inserting a bud from a diseased tree into a healthy stock, whereby the disease is continued in the growth from the bud, and in a few cases was extended to the growth below the bud); that the conclusions are faulty because buds weakened from other causes as by variegation, etc., show in many cases precisely the same results, while the stocks in many other similar cases show no influence whatever upon the cion or bud growth. To substantiate this view we quote the following taken from Farmers' Bulletin No. 17 of the Department of Agriculture, by Prof. Erwin F. Smith, the government specialist and perhaps the best authority on peach yellows in the country:

"There has been much speculation respecting the nature of this disease, inasmuch as climate and soil do not seem able to originate a plainly communicable malady, and no fungi, bacteria or animal parasite has been identified as the cause. At present, peach yellows seems nearest allied to that phenomenon in plants known as variegation. It is now recognized that the variegation in many plants is a disease mani-

festing itself in stunted growth, imperfect assimilation, hastened development and feeble vitality. Moreover, in a number of plants, e. g., jasmines and abutilons, this condition is transmissible to healthy stocks by budding or grafting in the same way as the peach yellows."

CANNOT BE PROVED.

The contagiousness of the disease cannot be proved until the juices of a diseased tree be introduced into a healthy tree, or a specific germ is discovered and separated into pure cultures and then introduced into a healthy stock, thus producing the disease as is done with tuberculosis in animals and the fire blight in the pear.

That the disease or condition at first appears on one or two trees only, and that the other trees of the orchard are affected later, is no proof in itself of contagion, for all the trees will die in a short time, generally within fifteen years, unless grown under especially favorable conditions, and most of them with what appears to be the yellows.

DIG OUT THE WEAKLINGS.

The writer contends that digging out the trees weakened from any cause whatever, as soon as a weakness is apparent must result in an improved condition of orchards anywhere; that the trees remaining will naturally receive more care and attention and consequently will improve more rapidly than if the same amount of care were extended over a larger number of trees; but that this is no proof whatever that contagion existed and has been prevented by this treatment.

The improvement in the orchards in the state of Michigan since the peach yellows law was enacted so often reported, has come, the writer believes, more from the increased intelligence and skill of the growers than from the effect of the law. The orchardists in that section grow their trees more carefully and skillfully than formerly, they use chemicals instead of stable manure, they plant only on soil well adapted to the growth of the peach, and fully understand that it doesn't pay to grow peaches on weakened trees any more than it does other fruits under the same conditions, and especially so when young and vigorous trees can be grown up to fruiting size in three or four years.

These causes alone are sufficient to account for all the improvement reported, and which could have been brought about by the growers themselves, and nearly all of the expense attending the execution of the law saved. Some credit, however, may be given the law for this improvement, but a great principle is involved that should not be violated, and many believe such laws are unconstitutional because no wrong has been proven.

GROWERS CAN TAKE CARE OF THEMSELVES.

The writer is sure that the fruit growers of Massachusetts, who possess above the average amount of intelligence, can and will learn and apply all the remedies suggested by the proposed law and the experience of the growers of other states, thus avoiding the ill feeling and discontent sure to arise from increasing the burden of taxation by the salaries of a commission and its deputies.

With the knowledge we now have, with conditions favorable for the production of as fine peaches as can be grown anywhere in the world, the industry of peach growing in Mass.achusetts should rapidly increase, but this can only be done with success by conducting the business on business principles and the prompt application of this knowledge.

## THE TIMES ARE OUT OF JOINT. REFLECT!!

THE MASSES want to be **HUMBLED!** So they buy inferior and dangerous soaps to procure **WORTHLESS** presents, or else the dealer recommends cheap soaps on account of extra profit.

THE BEST IS THE CHEAPEST.

If you want the **BEST** and **PUREST** soap made, **BUY** the famous **WELCOME** and **WHITE OREST** Soaps.

THEY HAVE NO EQUAL and will not injure the finest fabric or skin.

Made by **CURTIS DAVIS & Co.** BOSTON, MASS.

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THE RIGHT METHODS.

Peach growers of Massachusetts, let us each and all be prompt to act in this matter; plant our trees only on suitable land, well elevated and exposed to a free circulation of air, use only chemical fertilizers, and until the trees set a crop of fruit apply only enough to produce a moderate growth of well-ripened wood. By this treatment we may lengthen the life of the trees in our orchard many years. The trees will die sooner or later and more or less of them with the yellows, no matter what remedies we may apply, and all we can expect to do is to keep them in a vigorous, healthy condition until we can get a few crops of thoroughly good fruit. Such fruit and such only will sell at paying prices.

The writer would advise the destruction of all trees as soon as they show marked signs of disease, for while diseased trees may in many cases be improved by severe pruning and proper fertilization and cultivation, it will be more profitable to plant new trees in their places or better, in new orchards.

See our Special Offer on the sixth page.

## Cream of the Bulletins.

By analysis and by feeding experiments in Germany with sheep, pigs, and a cow, the following rather surprising conclusions were reached. Horse-chestnuts have a feeding value about three times as great as beets; cooking adds to their value; sheep and cows eat them readily; the quality of the milk is not affected and it was consumed by calves without bad results; pigs do not relish horse-chestnuts.

The New Jersey Experiment Station has shown by analysis that a crop of Crimson clover six inches high has accumulated nitrogen per acre that would cost \$15 to buy; at 13 inches high \$25.50 per acre, while at full maturity it is worth \$30 per acre.

A brief account is given of field experiments conducted in Germany during the past year with pure cultures of tubercle bacilli "nitragin." The results in 27 per cent of the trials were highly favorable to the use of "nitragin," 12 per cent were unfavorable, while in the other trials the results were negative.

A horse receiving a nail puncture in the foot suffered five days later from an attack of tetanus. He was treated at the Delaware Station to subcutaneous injections of the blood serum of a horse which had recovered from tetanus. At the end of 22 days the horse convalesced. It required one pound of serum per 1000 pounds of live weight of the subject. The expense for the serum in this case was \$50.

TOMATOES.

To ascertain how much nitrate of soda can safely be applied to plants in setting out, solutions of different strength were used by Mr. M. H. Beckwith at the Delaware Station to water the plants. One group of plants received 3.5 grains of nitrate per plant, in one-half pint of water poured directly about the roots, and the plants of the other groups received 7, 14 and 21 grains, respectively. One group served as a check, the plants being given water only. The plants were set on June 10, and on June 25 all of those watered with the strongest solution were dead, only one plant of each of the next two groups was living, seven were alive in the group receiving 3.5 grains, and all in good condition in the check group. The author concludes that "only a small amount of nitrate of soda can be applied directly to the roots of tomato plants when transplanting." Quite heavy applications can be made without injury to the plants if applied to the surface of the ground or worked into the soil.

Notes are given upon 51 varieties of tomatoes grown at the station.

## Has Slack Reformed?

According to Colman's Rural World, Farmer Slack has reformed; but it is to be feared that the change is not lasting.

One bright day in June, runs the story, when the trees were in full dress, the wheat fields waving their beautiful golden grain, the corn fields sere with corn stalks, and the meadows an inspiring scene, Farmer Slack went to see Farmer Thrift, who lived on an adjoining farm. Farmer Thrift was, as his name implies, an energetic and prudent man, ever ready to learn and be taught, careful and practical; not given to the habit of ignoring the needs or importance of small things. He was, of course, a firm believer in farmers' institutes, and attended every meeting; he read the agricultural papers, and, in short, spared no pains in keeping fully up with the times. But his unfortunate neighbor, Slack, denounced all methods of scientific procedure, derided improved and up-to-date machinery, and designated his ablest agriculturists as "fools," "city farmers," etc.

To the reader acquainted with such men it goes without saying that he failed to make farming pay. Well, Farmer Thrift took special pains to show and explain to Farmer Slack his new methods, the various up-to-date machinery he used, and even attempted to reason with him about the advantages of modern farming. But all the explanations Farmer Thrift gave him evidently struck an unfamiliar chord; he did not see why or how such and such could be, etc. He was taken in the poultry yards, through the pig pens and into the house, and the conduct of each fully explained. He could not but see how conveniently his neighbor had things arranged, and how well and promptly everything was attended to; in fact, he was somewhat inspired, and felt that he might do better if he were to try. In this spirit Farmer Slack returned home, where he found the cows in the garden, pigs and calves in the yard, and horses in the wheat field. But from that day he began to do better. He had been introduced to the new order of things. It is but just to give credit to both, for Thrift "told how," and Slack was man enough to "do the rest."

The widest canal in the world is said to be the Chenab Irrigation canal in the northwest provinces of India. It is 110 feet broad, and will be 200 feet when finished. The main canal will be 450 miles long. The principal branches will have an aggregate length of 2,000 miles and the village branches of 4,000 miles; 250,000 acres are already irrigated.

## THE WORLD OVER.

—The shah of Persia is very ill.

—Insurgents in the Philippine Islands are still active.

—The Cubans have this week won two important victories.

—Mexico is negotiating for three warships to be built in England.

—Spain owes the army \$55,000,000 and can hardly borrow more money.

—The natives of Mashonaland, South Africa, are again on the war path.

—The Defender may be purchased by an Englishman and raced in British waters.

—"Ian Maclaren" says his trial for heresy, no matter how it evenes, will not change his views.

—Primrose day, the anniversary of Lord Beaconsfield's death, was celebrated in England yesterday.

—Telegraphic communication is now established between London and Sandakan, North Borneo.

—Great Britain has bought Delagoa Bay, significant of anticipated trouble with the Transvaal.

—French producers of olive oil ask an increased tariff to prevent injurious American competition.

—Cecil Rhodes is thought to intend resumption of relations with Kruger, independently of Great Britain.

Canada's new tariff law may fall in its object to favor England, as other nations may take advantage of its provisions.

—It is understood that the governments of Chili and Brazil have entered into an alliance with a view of guaranteeing the maintenance of peace in South America.

—Australia has this year reached one hundred million ounce-line in her production of gold; that is, she has already since 1851 produced that amount of gold, and the yield of that precious metal is on the increase. Victoria has produced sixty-one per cent of this output.

—A tremendous explosion occurred on the underground railway in London, Monday, as a train filled with men from the city was making its usual stop at the Aldersgate Station. The glass roof of the station was blown out, and the platform was strewn with debris. Many of the gaslights in the waiting-rooms and on the platforms were extinguished, and the station was left in semi-darkness. A general panic ensued. When comparative quiet had been restored it was found that a first-class coach had been completely wrecked, and that its occupants were lying about maimed and bleeding. Ten of the injured were found to be in a precarious condition, and were removed to hospitals. The cause of the explosion is not known, but it is believed to have been the result of a collection of gas which became ignited in some way. Many persons, however, believe that the disaster was not due to accident, but was caused by the explosion of a bomb which had been placed in the station with the intention of wrecking it.

—Near Shelbyville, Ind., a physician-hunting, came upon an old shotgun from which the stock had all rotted away. It was identified as having been the property of James Reed, a young man who, after being killed sixteen years ago, left home, taking his gun with him, and was never heard of again.

## We now import Wood Ashes

Direct from Canada, collected by our own employes, in the hard-wood districts, test them, and ship them out under **OUR OWN** guarantee of strength and purity. When you buy wood ashes or any other fertilizer, take Prof. Johnson's advice, and deal only with concerns of known responsibility. Our twenty-five years in business, our ample capital and facilities, combine to make our guarantee of value. Our **BOWKER'S BONE AND WOOD-ASH FERTILIZER** at \$25 per ton is an excellent combination. Write for particulars.

**BOWKER FERTILIZER COMPANY,** 43 CHATHAM STREET, BOSTON.

## WHY Don't You make cooking

A Delight with the

## GLENWOOD

Patent Oven Thermometer



Used only on Glenwood

The Glenwood agent in your town has them.

The "Greatest Help" to modern cooking ever invented.

## RANGES.

## EVAPORATE YOUR FRUIT

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